

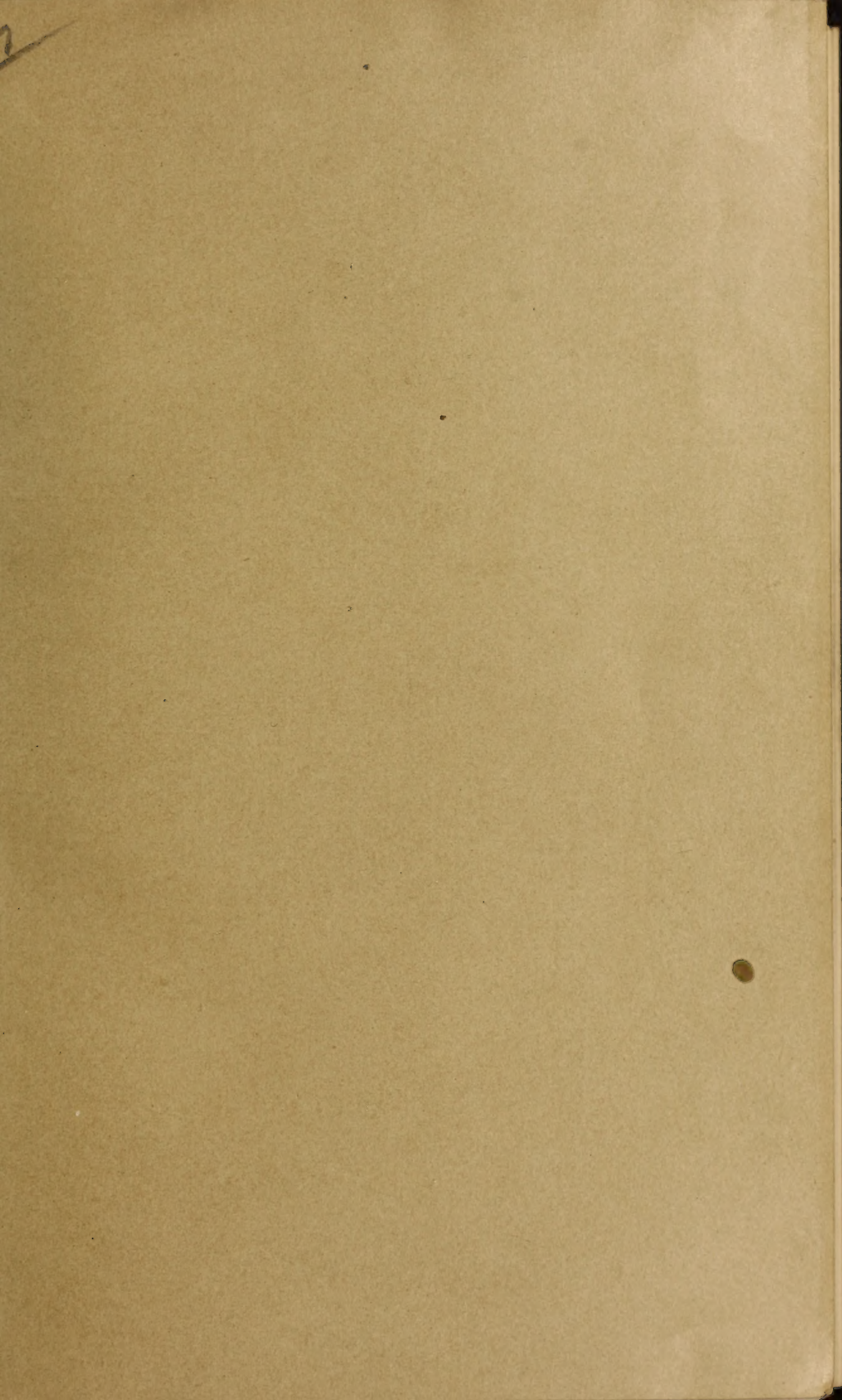
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Southern California Practitioner

VOLUME XXVII.

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HYDROPHOBIA—REPORT OF CASE.*

BY CHALMERS FRANCIS, M.R.S.C., ENG., L.R.C.P., LOND., LOS ANGELES.

Hydrophobia—Report of a case, from notes taken at the bedside of C. H. B., age 15, on August 25-27.

These notes, being as stated, bedside, may repeat themselves here and there, but I decided to read them as they are rather than touch them up and perhaps improve them, my main object being to present a clinical picture as seen by me of a case which had already puzzled a medical brother, and to which a large amount of public curiosity is always attached.

I was called Friday, Aug. 25, at 7:30, and was met at the sidewalk by the mother, who told me that they had a peculiar case of throat trouble, that they were unable to find out what the matter. I was asked not to anger him because he was so excitable. I was told that they had discharged their doctor and the boy had asked for me.

The history I was given was that the boy was always a healthy youth, and strong, attended school, and at night was a life-saver and swimming expert at Bimini baths. During school vacation he had not worked and been

at home all the time except when on a ranch shooting rabbits and doves. About — ago he had a head injury while diving at Bimini. No other sickness or accident known.

On Saturday, Aug. 22, he was feverish, but slept well on Sunday, 23rd; he was not keen to get up, but ate breakfast; refused to go to Sunday school and went to bed. Father noticed the boy was flushed, and he complained of legs being stiff, and walked stiff; ate no dinner, but got up in the evening; no appetite; feverish.

Monday, 24th. Had no sleep, disliked to drink because of throat; was feverish and irritable; got dressed and walked stiff. He walked with both hands on buttocks, and said he was stiff from digging a few days before.

Tuesday, 25th. No sleep, very excited, easily angered; said brother made faces at him. Doctor sent for. His condition was excitable, nervous, light-headed, easily vexed and pains in chest, throat and abdomen slight and not troublesome, and difficulty in swallowing at times.

*Read before the Los Angeles County Medical Association, Nov. 17, 1911.

This condition continued, with no improvement, so they discharged the doctor, they stated, that morning, intending to have no doctor, but the boy insisted on sending for me, and I was called to pacify him.

On entering the room the boy looked towards me with a peculiar expression of anxiety; he was flushed, looked ill, and spoke rapidly. He said he was pleased to see me, and begged me to do something quickly for him for he is very sick. He answered my questions irregularly, but sensibly; is irritable, contradicts persons, quickly, and is easily angered, as when I asked if he had vomited, he said, "Of course not." When his mother said he had had no pain, he shouted, "Liar! liar! you lie!" Soothing him he immediately grew quiet, said he was sorry he was naughty, and begged his mother's pardon. He keeps asking me to help him quickly. His bowels had been opened with calomel, he had eaten supper, two bananas and a pint of milk; he had had no sleep.

Exam.—Face flushed, pupils dilated, sticky saliva frequently being wiped away or spat out, respiration peculiarly variable, deep or shallow, spasmodic. Pulse, very rapid, and small, extremely restless and light-headed. I then asked for water to wash my thermometer; he immediately shouted, "NO! NO! I won't drink. I don't want to!" He quieted when I told him the use of the water, saying, "I don't want to drink." I asked why, he said, "It chokes me." When the mother left the room he had some attack partly observed, seemed frightened at door opening; when mother returned he heard her coming up the stairs, he grew frightened and shouted, "Don't open the door! Do not! Go easy! Go easy!" the facial muscles convulsed. He said the draught hurt him. His Temp. 102. Chest examination very difficult, so restless, jerking and mov-

ing. Heart, irregular, very rapid, respiratory spasms causes variation. Auscultation negative. Patient breathes by holding breath for 40 secs., then violent insp. and expr., variable intensity and frequency for 20-50 seconds; unable to get satisfactory auscultation apparently negative—knee-jerks absent, patient states his legs have wasted; toe reflex normal. Patient states that tapping patella-tendon gave instant relief—no more pain, no suffering, all vanished with this treatment, and kept referring to this with exaggerated thanks. I now tried him with a drink on the ground of giving medicine (he objected to take water). He sat up, stared anxiously, looking frightened, trembled violently, beat the bed with his left hand, then offered to take up the glass; he seized it violently, quickly applied to mouth, thrusting head forward to meet the glass, took a gulp, spat it out all over the bed (swallowed perhaps a little), and shouted, "Take it away, it chokes, oh, doctor!" He fell back on the bed and said, "I can't swallow." This act he repeated on coaxing. He feared he would choke and suffered mental agony.

Whenever the door opened he had terror and screamed, or lay on bed fighting the desire to scream—he knew he screamed and said it hurt. He quieted, occasionally referring to the patellar tap as a great relief. Examination of throat showed no abnormality, to inspection. I took the father out of the room and told him I diagnosed rabies, gave a fatal prognosis, assured him that early recognition would have made no difference, as there was no known cure to this condition. The father knew of no bite of dog or other animal, except ten years ago. I told him to say nothing to the boy, but send me his wife. She told me (1) they had a dog die in their shed "of poison" after "a week's illness," between fall, 1910, and Easter, 1911. No

knowledge of bite since boy was 5 years old, but remembered boy was frightened that the sick dog would bite him. Three days ago she mentioned to husband her fear of hydrophobia from boy's objection to water.

Dr. Powers saw the case that night when the boy said he had lost power in his legs lately. Prescribed Chloral, 30 grains, and repeat in two hours if needed.

I was recalled 5 a.m. Saturday, 26th; child in convulsions, twitched, clonic spasms of arms, face and neck, pupils dilated; gave Morph. $\frac{1}{2}$ grain. Convulsion ceased, but patient remained very noisy, talked incessantly, delusions of location and frequently tried to drive something away; door opening aggravated condition and caused spasms of facial muscles; he spat profuse sticky saliva all over the bed and room; had refused the Chloral, so I gave (after $\frac{1}{2}$ hr.) in banana mush 45 grns. Swallowed with difficulty; complained of burning in the throat and chest; grew quieter, but no sleep. Returned at 8:30 a.m.; patient had slept one hour, woke quiet at 8:10; after few minutes suddenly seized with terror of 52 little people on bed, saw moving things, gave swimming lessons, and frequently shot at something or asked father to shoot, finally jumped out of bed, but feet gave way and he fell; struck at me; when restrained, threatened to kill or shoot me; immediately quieted, shook hands, or suddenly hugged or kissed me; kept trying to get out of bed. Gave Morph. $\frac{1}{2}$ grain; quieted for few minutes, became restless, tossing on bed, twitches, talked and scratches left leg; says mosquitoes bit him. 11:45, violent; gave Morph. $\frac{1}{4}$ grns. and Choral 30 grns. 12:00 noon asleep; slept till 2:30; some cyanosis and spasm of vocal cords; at 2:30 restless, delirious. Pulse bad, 120. patient lies spasmodically breathing, suddenly starts up, stares at something, shouts, falls back, scratches left leg and back.

RESP. spasm lasts eight seconds, then two; four short gasps for 30 seconds, then irregular breathing for 50 seconds, then long sigh, silence; repeats.

Never asks for water, but says "yes" if offered, but refuses to take any, throat always dry. 2:45 gave chloral, 15 grns; 3:00, slept till 4:00; excitement returned; 4:30 asleep; 5:00 woke rational, quiet; 6:00 ate one banana, two cups coffee, $\frac{1}{2}$ glass of lemonade—this was taken with little difficulty; refused water; later ate a little custard; 6:30 I returned to find him vomiting; he blamed the coffee. Grew very excited, was under the impression that he had seen God, talked with an angel who told him to take no more medicine; sweating profusely and saliva running profusely. If angered he would spit over the person. Had a continuous desire to urinate and this always after swallowing; refused to give up the bottle, so wetted the bed with contents. Gave Chloral grains 15. His condition was: pupils dilated $\frac{2}{3}$, profuse sweating, feels cold, pulse faint, rapid, resp. quieter than in morning, spasm less marked, very talkative but rational. asks frequently for mother, temperature 104; fanning face caused spasms and angered him; 7:45 asked for a peach, ate and urinated; asks frequently for sweat wiped off face; ate grapes, enjoyed and swallowed easily; 8:25 has been quiet, now asks for hot medicine; gave cantaloupe well peppered, enjoyed and easily swallowed. Now when he smiles he grins; is positive he has seen God Who is taking him to heaven; ate custard; saliva less since feeding; asked for hot medicine; gave hot water, drank easily, immediately urinated, less delirium; any rapid movement or noise excites and angers him, 8:00. 8:35, getting very excited, feels cold, sweats, wants injection, threatens to hit me when I wait; gave $\frac{1}{2}$ grain, pulse varies from 120 to a thready uncountable; temperature

101.4; he draws his legs up by dragging up with hands and then has to ask to have them pulled down; 9:20, for past hour has been very restless and severe cramps in both legs and wishes massage; gave Chloral grains 15; is anxious to sleep, but keeps screaming and very excited; delusions of time and location; asked for water, drank easily but spits profusely, and constant desire to urinate; has become so unmanageable and tries to get up; gave Morph. grain $\frac{1}{2}$.

9:30, nurse drew my attention to swelling of L. cheek; on watching swelling gradually spread over face and looked as if he held something in his cheeks, some cyanosis, pulse 120, severe spasms of the throat, palpitation shows surgical emphysema all over face and neck, resp. 18, more regular, snoring, gasping; 9:45, sleep; 9:58, had convulsion, clonic twitching general; 10:10, asleep, breathes by gasps, mostly inspiratory, moans, face cyanotic, swelling worse, temperature seems to have fallen; 10:09, convulsion; 10:21, 26, 35, 38, recurrences; 11:50 left bed still in convulsions, patient still; 4:20, recalled; patient rested till 1:30, became restless, said "pa," "ma;" 2:35, was given Morph. $\frac{1}{4}$, repeated in one hour, nurse feared he was getting unmanageable; 3:30-4:00, kept trying to sit up and moaned all time, sent for me; patient moribund, surgical emphysema reaches from zygomata to one inch below clavicles down rt. forearm and left arm to elbow, it passes down axilla to below trans-nipple line; died 5:35.

HISTORY OF DOG-BITE.

Grandmother, aged 70, states:

(1.) She dressed fingers of one of her grandsons, bitten by the sick dog, nine months ago; no confirmation of this—the surviving boy states he was not bitten.

(2.) The deceased was bitten two years ago by another pet dog that died in a similar way of poison; confirmed by mother. A female neighbor remem-

bers positively the boy was bitten when the dog was ill; does not remember where, but fancies it was on hand (statement made unknown to and independent to grandmother's statement).

(4.) All family agree that he was bitten ten years ago, and that he frequently said he feared the sick dog would bite him.

(5.) Brother saw that the deceased had sores on his hands when caring for dog and always stroked it with back of hands to prevent getting any poison in sores.

(6.) The date of dog's sickness fixed at nine months ago; neighbors say there were 2-4 dogs bitten by a mad dog in that street about the said time, and Dr. Byles, the dog specialist on West Second street, said he killed a dog for rabies in four blocks of the house about that time.

I have read this paper because the clinical picture seems so obvious that diagnosis seems natural, and I feel the need of clinical pictures described as I have tried to may help others.

Bradbury Building.

DISCUSSION.

Dr. Stanley Black: The interesting feature of this case is the apparently long period of incubation, eight to nine months. We read in the literature, especially newspaper literature, of long periods of incubation, i. e., many years, and it has been a popular superstition that if an individual has been bitten by a dog with hydrophobia, that individual may at any time subsequently, even after a period of many years, become rabid. A period of one year incubation is the longest authentic case we have on record. The shortest period of incubation I know of was in the case of a child I had under the Pasteur treatment. The child had been bitten on the mouth, through the lip. Treatment was instituted the day following the bite, symptoms developed on the fourteenth day, and on the sixteenth

day it died of typical hydrophobia. So we can have a period of incubation anywhere from fourteen days to twelve months. In the average case, however, it is about six weeks, and in the cases we have had here, six weeks has been about the usual length of time. Mr. Scott's boy was the first to die here of hydrophobia. He was bitten about eight weeks before. In the case just reported there was absolutely nothing but a passive congestion of most of the organs. All the organs were otherwise healthy. When the brain was examined microscopically, the Negri bodies were found. At the autopsy it was stated that the boy had positively denied being bitten, although he had said he had had a dog eight months before that they thought had been poisoned. It was stated that the dog's jaw hung open, and he dragged his hind legs: to one familiar with the condition, the picture of dumb rabies. The saliva of a dog with dumb rabies is very infectious, and this boy had always on his hands cuts and scratches, fresh ones, which would render infection easy. We have had a number of cases in the neighborhood of Los Angeles in the past two years. The first case was in Imperial Valley, a man bitten by a cat; then Mr. Scott's boy; then a case at Riviera; then the child I have spoken of. Just following the death of this boy, a boy was brought here from Anaheim. In all, we have had about eight human deaths. An epidemic in dogs, horses and other animals has existed for a period of about two and a half years, but is evidently on the decrease. I have not seen the head of a rabid dog in the past two months. I have had a number of people consult me for dog bites. I always advise them to tie up the dog, the wound to be cauterized at once with C. P. nitric acid. If at the end of ten days the dog shows no symptoms of rabies, the individual who has been bitten is per-

fectly safe. We know that the animal can convey the disease at least five days before the symptoms appear in that animal. There are several such cases on record. The dog must be tied with a chain, as he may chew a rope and get loose. If the dog dies of any disease within that time, the brain can then be examined for the Negri bodies. To kill the dog is the worst thing possible, for in the early stage of the disease the Negri bodies are frequently not found, so the only thing to be done in that case is to inoculate an animal, by which we only lose time. We all know that treatment of any kind, except preventive treatment, is of no avail. As to the Pasteur treatment, it takes three weeks to get the immunity established, and about two weeks for full immunity. If we have a long period of incubation we have an advantage in preventing the disease.

(In reply to a question:) In experimental work in animals it has been found that the immunity lasts at least a year. In humans it probably lasts as long. The question is sometimes asked whether the nitric acid may be used an hour after the injury is received. Experiment on animals has shown that the use of C. P. nitric acid within twenty-four hours will save 90 per cent. of the animals, so that if any of you should see the case, use the nitric acid and it will probably prevent the development of the disease. Carbolic acid may be used first to anesthetize the surface, then the nitric acid can be used with very little pain. I have cauterized wounds in children in this way with very little trouble.

Dr. Francis: The day the boy died, or rather, the next day, Monday, the mail carrier delivered a letter from New York avenue, addressed to the diseased boy, by some one sending a cure for hydrophobia, stating that the Pasteur treatment was useless.

REPORT OF AUTOPSY MADE BY
DR. STANLEY P. BLACK, AT THE
REQUEST OF DR. W. V. C. FRAN-
CIS, LOS ANGELES, CAL.,
AUGUST 27th, 1911.

Subject: Boy, 15 years old.

Name: Charles Brennan.

Body: Well nourished; about 5 ft.
4 in. high.

External appearance. Both cheeks, the neck on both sides, the chest to one inch below the nipples and both arms to the elbows show well-marked emphysema.

Brain: Skull-cap removed—emmissary veins of skull full of dark blood, which oozes from three openings after skull-cap has been washed.

Cerebrum shows very marked congestion—all convolutions are darkly lined by the blood that has settled there.

Brain removed unbroken—veins at the base of the brain are all distended and the whole brain gives appearance of being more vascular than normal. Cerebro-spinal fluid is a trifle cloudy and there is slight cloudiness of the Pia. There are no tubercle along the Anterior Cerebral artery on either side. The blood is clotted in the veins and shows no sign of increased fluidity.

Brain sectioned transversely shows more bleeding points than normal and the blood is of a darker color than usual.

Lateral Ventricles opened—Left shows normal amount of fluid, but the fluid is slightly cloudy. Right shows just a drop or two of turbid fluid.

Basilar ganglion shows increased vascularity—hyperemia. Fourth ventricle opened—amount of fluid normal, floor normal.

Chest: On taking off Sternum the Mediastinum was found emphysematous throughout. Left lung—very emphysematous along lines of the interstitial tissue. On cut section shows same and marked passive congestion; dark blood oozes from cut surface; no nodules present.

Right lung not so emphysematous, otherwise the same.

Trachae—marked passive congestion. Larynx—slight congestion.

Pericardium: Bulla on anterior surface of pericardium. On opening pericardium find about 3 dr. perfectly clear fluid. Surface of the pericardium and the epicardium both normal.

Heart: Right vent.—Mitral, valve normal.

Left vent.—Tricuspid valve, normal.

Left vent.—Contains a considerable amount of fluid blood and the right aur. contains a large amount.

Pulmonary valve, normal.

Aortic valve, normal.

Aorta, normal.

Liver: On section shows congestion.

Color brownish-red. Liver markings very indistinct and are almost obliterated.

Consistency, soft.

Gall-bladder, no adhesions in this region. Contains golden-brown bile and no mucus. The mucosa of gall-bladder, smooth.

Throughout the abdomen the serous membranes are tougher than is usual—they are to ren with some difficulty.

Pancreas: Dark-red in color; otherwise normal.

Spleen: Slightly enlarged, 5 by 3 by 1½ inches.

Consistency, firm.

Color, dark-red.

Pulp does not scrape out easily.

Abdomen: No fluid in Peritoneal cavity.

Renal veins very much distended.

Spermatic veins distended.

Suprarenals—Right, normal; left, normal.

Kidneys—both normal in size. Right, consistency, normal, color bluish-red, capsule strips normally, section shows acute congestion. Left, same.

Bladder: Contains ½ oz. cloudy urine; mucosa, normal; prostate, normal.

Stomach: Slight echemotic spots pin-point in size on mucosa.

Stomach mucosa not much digested, especially in the cardiac region.

Pyloric region shows on anterior surface an eroded spot $\frac{3}{4}$ inch in diameter, its base is marked by pin-point haemorrhages and the mucosa between it and the pylorus shows pinpoint haemorrhages, also Pylorus normal and the beginning of the duodenum.

Appendix: Lies under the serosa on

posterior surface of the colon, about 5 inches long and normal.

Ilium: The solitary follicles are very prominent, hard, shot-like, firm in consistency and raised above the surface of the mucosa.

Pyre's patches are not so prominent, though they are also slightly enlarged.

Caecum: No enlargement of follicles.

Mesenteric glands: Some are slightly enlarged, rather firm in consistency.

THE PREVENTION OF ABORTIVE SEQUELAE.

BY WALTER D. BOGGS, A.B., M.D., PASADENA, CALIFORNIA.

As the present age of medicine is along preventive lines rather than curative and considering the fact that gonorrhoeal infections and abortive sequelae constitute almost 80% of gynecological work, it behooves us as a profession to have more stringent laws relative to "criminal abortion" and to invoke the aid of the profession at large to consider the sequelae of abortion, in many cases, as a professional taint in order that the cases of abortion in the future may receive more competent treatment than many of them have received in the past. Let every doctor consider abortion a serious condition, not "per se," but on account of the frightful sequelae subsequent upon inefficient professional treatment.

The Sequelae of Abortion are increasing yearly, and among the conditions that arise are Acute Endometritis, Parametritis, Salpingitis, Pyosalpinx, Subinvolution, Displacements, Ovarian disorders of many kinds, dysmenorrhoea, etc.

The cause of this increase of Abortive Sequelae is along four different lines:

First—Criminal abortion is on the increase.

Secondly—Ignorance of the laity on the significance of abortion and on the moral and legal rights of child.

Thirdly—As civilization advances, so does "syphilisation."

Fourthly—Incompetent therapeutic duties of some of the members of the profession.

To check the rate of "criminal abortion" is a problem for the Federal, State and municipal governments to handle. Sufficient will it be to say that New York City contributes 80,000 cases annually with but few convictions. Paris is also a chief offender and the French government is greatly exercised over this serious condition of affairs and offers a premium on every full termed child.

All criminal abortions are incompetently handled in that Evacuation of the uterine contents is Incomplete and, hence, Sepsis is the result. Fifty per cent of all miscarriages are criminal in character and it is not surprising that the hospitals are overcrowded with acute pelvic inflammatory conditions subsequent upon abortion.

To check the rate of abortion due to ignorance on the part of the laity can be best handled by acquainting them with the dangers of neglected cases, and what is of more importance by educating them so that they will recognize the "legal" and "moral" rights of the child and understand that human life begins at conception and that any

efforts made by them to thwart nature's plan of reproducing the human species is "Murder in the first degree" or a "Life for a life." Much can be done along this line by education.

To check abortions due to Syphilis is like trying to revolutionize the world.

To Check the Sequelae of Abortion due to Incompetent medical treatment is one phase of this condition that can be successfully handled by the medical profession and it is on this account that I purpose to expound a few practical points on the proper treatment of abortion and the reasons thereof. The treatment is simple, effective and productive of good results without the frightful sequelae in those cases seen early and where efficient treatment has been promptly instituted. The cases that come into the wards of the hospitals are of course neglected cases and, while the treatment is the same as for earlier cases, yet the sequelae often develop as the result of neglect.

The line of treatment is based primarily on the embryonic development of the fetal circulatory phenomenon and, for that reason, I make the statement that "all abortions occurring Before and After the period between the eighth and twelfth weeks are Incomplete and Septic," due to the placental development characteristic of each period.

This is not a theory but a fact.

Why?

Because abortions occur with greater frequency during the second and early part of the third months as the direct result of the fetal nutritional changes, this being the transitional stage from the merely temporary to the permanent "placental" circulation. During the fourth to eighth weeks, the placenta is in the process of construction, its limits and identity being obscure. About the eighth week, the placenta is fairly well developed and towards the twelfth week its limits are distinctly defined. After that period up to the sixteenth to eighteenth week the finer details of its

development are worked out and the placenta becomes more and more firmly attached to the uterus.

Abortion occurring then Before, During or After the period eighth to twelfth week has a definite significance relative to the complete expulsion of the placenta whose remnants left in the uterus are the fertile soil for sepsis.

(a) Before the eighth week, the placenta is insufficiently developed and defined, and, hence, complete evacuation of the placental tissue spontaneously is impossible.

(b) Between the eighth and twelfth weeks complete evacuation of the uterus of the ovum and appendages spontaneously is possible because the placenta is sufficiently developed as an entity and is not firmly attached to the uterus.

(c) After the twelfth week, the placenta is too firmly attached to the uterus and, in abortion, complete spontaneous evacuation of placental tissue is impossible. There always remains some tissue sufficient to encourage "sepsis."

Then again, it is only after the second skipped menstruation that the woman suspects pregnancy and then, in many cases, she will resort to means to terminate the condition through the agency of instrumental interference.

Moreover, it is during the second and third months that retrodisplacements are most likely to occur in pregnant women, due to the sudden overloading of the uterine circulatory apparatus in preparation for the permanent establishment of the placental circulation. The placenta is most often located in the anterior or posterior upper uterine segment and this increased weight is conducive to a displacement where the uterine ligament have lost their normal tension. Thus a retrodisplacement will oftentimes provoke an abortion.

On the fact that all abortions, except those occurring between the eighth to twelfth week, are incomplete, the burden of guilt of subsequent Sepsis with its many sequelae rests upon the shoulders

of one of two persons, either the woman herself through neglect or ignorance, or, as happens frequently, the attending physician, who knowingly or unknowingly fails to completely evacuate the uterus upon obtaining a recent history and suggestive and positive signs of abortion. He thus permits Sepsis to creep in and then the damage is done. By evacuating the uterus a few days previously, sepsis in many cases would have been avoided.

The Underlying Therapeutic Principle in abortion is to control "hemorrhage" and "prevent sepsis," both of which can be accomplished by Prompt and Complete Evacuation of the uterus.

Evacuation of the uterus can be performed in two ways, (a) Digital Evacuation and (b) Curetting.

"Digital evacuation" is the only Sane, simple and practical way, as it always assures the removal of all uterine detritus and, since Sepsis is dependent upon retained secundines, the efficiency of this method is obvious.

"Curetting" is a poor way at the best because it scrapes off Nature's protective layer on the endometrium and surely and effectively opens up all the lymphatic channels for absorption; the nearer you get to the cervix, the greater is the power of lymphatic absorption. Unfortunately, the curette is our only means at present to evacuate the uterus before the eighth week, as the cervix is not sufficiently patulous before that time to permit of a digital evacuation.

In all cases of abortion, it is wise for the physician to Classify his case under one of three periods, before, during, or after the eighth to twelfth week period. The necessary data can oftentimes be elicited from the patient while, in obscure cases, the patulency of the cervix will be an excellent guide as to the estimated period of the pregnancy.

The Importance of this classification can be readily seen when the statement is made that the Plan of Treatment is dependent entirely upon the Patulency of the Cervix.

Before the eighth week, the cervix is not sufficiently patulous to permit of a digital examination.

Between the eighth to twelfth weeks, a vaginal tampon inserted for twenty-four hours will dilate the cervix sufficiently for digital evacuation.

After the twelfth week, the cervix will be sufficiently patulous to permit of digital evacuation.

Hence, we can lay down this general rule, namely, "Before the eighth week, we must use the curette, while, after the eighth week, Digital Evacuation should and Must be done if one hopes to prevent sepsis. Digital evacuation and examination enable one to be positive that the evacuation is complete while the curette's evacuation tells nothing but, unfortunately, it is the only available means previous to the eighth week.

Sepsis is prevented then by

1. Aseptic Technique.
2. Sufficient cervical dilatation to obtain complete evacuation.
3. Complete evacuation verified by digital examination.

Sepsis is favored by

1. Poor technique including trauma of cervix.
2. Incomplete uterine evacuation.
3. Curetting after the eighth week.

To Recapitulate, with a history and signs of abortion and having assigned the case to one of the three periods, the method of treatment would be as follows:

(a) Specific Treatment:

1. Up to the eighth week:

(a) Dilate cervix with branched steel dilator to three-fourths of an inch.

(b) Curette carefully and systematically.

(c) Intra-uterine Douche, Tr. Iodine 3 i to Water 0 ii or Normal Salt Solution 120° F.

2. Between the eighth and twelfth weeks:

(a) Vaginal tampon for 24 hours to increase cervical dilatation.

(b) Invade uterus with Keith forceps and extract as much retained material as possible.

(c) Complete evacuation with finger.

(d) Introduce an intra-uterine packing soaked with Tr. Iodine for three minutes and then withdraw it.

3. After the twelfth week:

(a) Keith forceps.

(b) Complete evacuation digitally.

(c) Tr. Iodine intra-uterine pack for three minutes.

(b) General Treatment applicable to all three classes:

1. Vaginal tampon held by T bandage for 24 hours to excite uterine con-

tractions and, hence, expel any retained secretions.

2. Fowler's position for 24 hours to produce the most efficient pelvic drainage.

3. Fl. Ext. Ergot M X t. i. d.

4. Catharsis and Light Diet.

Before closing, there are two points that must be emphasized:

1. There must be No Intra-Uterine Manipulations following evacuation at any time, except the Tr. Iodine for three minutes only. Any douches are decidedly contradicted.

2. Never allow the patient out of bed until you have thoroughly examined for a retro-displacement, present in 40% of post-abortive women.

VALUE OF THE HEALTH DEPARTMENT IN THE LOS ANGELES CITY SCHOOLS.*

BY DR. ALBERT W. MOORE, PHYSICIAN TO THE LOS ANGELES BOARD OF EDUCATION.

For the past few months, and as a matter of fact ever since its adoption in Los Angeles, this department has been a much-talked-of and debated question. It is my intention today to bring before the public my views, as one who has had experience in the schools, and the views of others not vitally interested in the work.

Before commencing my discussion I wish to give a short history of the department since its inception. Four years ago there came to my office, then in the Wilcox Building, a man who had been my professor in physics in the Los Angeles High School. He laid before me a plan which was unique in itself, but which proved to be only the beginning of conditions which I believe have resulted in the greatest benefit at the present time to the children of our city schools.

This man, now our director, had gathered about him a coterie of three or four physicians who were giving

their services, gratis, for the examination of school children. It was then a clinic, depending upon the interest of mother or father, for the backward or deficient child. Six months following, during the superintendency of Dr. E. C. Moore, Drs. Laura Bennett, Herbert True and myself were appointed on a small salary to act as physicians for the schools. The following year Drs. Case and H. B. Tebbetts were added to our list, and this year Drs. Baueroft and Ethel Leonard, with seven nurses, further increased our numbers.

The city is divided into seven districts, conforming as nearly as possible to our school superintendent's districts, with headquarters for each physician in some High School or Intermediate School most centrally located in his district. Before entering any Grammar School, on account of the greatness of our districts, the amount of work which we have to do, and our desire to notify parents and teachers of our

*Delivered before the Los Angeles City and County Teachers' Institute, Dec. 22, 1911.

approach, our nurses precede us. They have been instructed as to the full meaning of the examination cards, and they instruct the teachers as to the manner of conducting and filling out the cards.

Then, in routine, such children as are considered backward or deficient by principal or teachers are examined by a member or members of our staff, if there are no objections made by the parents or guardians. If such there be, the parent or guardian in question is notified by the principal and requested to be present, and the mode of examination is thoroughly explained by the physician.

In my experience, after hearing an explanation and my reasons for making the examination, no parent has objected the second time; and very few have objected the first time.

Our first examination is for the gross lesions, and the eyes, ears, nose, throat, lungs and heart are examined. No clothing is removed by the physician unless the child shows some gross lesion which requires a more complete examination; and then this is not done without the presence of the parent or guardian or his consent. We have our men physicians for the boys and our women physicians for the girls when more complete examinations are found necessary. The child is examined and if found deficient in any particular which we consider is sufficient to prevent it from performing its school duties, the parents are notified of the facts and requested to take it to their family physician for a corroboration of our examination.

We do not favor any school of medicine nor any science or religion. We are simply interested in the child, hoping that the mother, father or guardian through love for the child will do something, probably simple in the extreme, or perhaps more grave in its nature, which will better prepare the

child to fight its way through life and enable it to combat with the great competition of this age of hustle and hurry.

In the High Schools our staff takes charge of the physical examination of the boys and girls who are compelled to take exercise under the direction of the physical director. As do all great schools and colleges, we consider it essential to examine each child and determine whether it has physical conditions or defects which should call for lighter work, or no work, in the gymnasium.

The men physicians take charge of the boys and the women physicians examine the girls, our districts overlapping so that both a man and woman physician are assigned to each High School. It is the duty of the nurse to follow up the work after we have finished a school, visiting the parents and explaining to them the meaning and gravity of the defects found.

We have at the present time, through the good graces of the Board of Education, established a hospital, under the direction of Mrs. P. F. McManus, president of the Parent-Teachers' Association, and Mr. George Leslie our director, on the grounds of the Children's Hospital. This is a semi-charitable institution for the care of children whose parents desire to have eyes, nose, throat and teeth cared for at a minimum fee, or without charge if the parents are unable to pay. Dr. Frank Miller, an eminent eye, nose and throat specialist, with an able staff, takes charge of this work gratis. The proceeds derived are turned over to the Board of the Children's Hospital for the maintenance of this institution. The dentist, Dr. King, cares for the teeth, devoting all of her time to the work, and is paid by the Board of Education.

These facts have been mentioned preliminary to what is to follow because I felt that so many statements had been issued, either falsely or ignorantly, that

an explanation was essential at this time.

With the vast army of school children, numbering thousands, of all classes and from all sections of this country, whose parents have come here to enjoy the beneficence of the continual sunshine of the Sunny South, does it not seem to you that a most careful supervision of each child is absolutely essential? There have been reported in this city during the past year 724 tubercular cases, 854 deaths, mostly of adults with families and children in the schools. Is it not essential that a careful inspection should be made of these children for the protection of your child and my child? Is it right because certain people are willing to sacrifice themselves and their children to the ravages of disease that, after years of study by the ablest of men, all sense of infection should be swept aside and your child and my child should be compelled to submit to equal exposure? These are some of the things which our department is attempting to assist our efficient Health Officer to prevent. Are we of any benefit to the city schools?

There is still another side of the work which is worthy of your consideration, and that is the educational side. We consider ourselves a part of the educational side as well as the medical side of the school work.

Many a child through faulty sight or defective hearing is considered a backward child, and is a continual repeater in his classes. His parents and teachers are not cognizant of the fact that he cannot see or hear as well as the other children. Perhaps the child is placed in the rear of the school room, and cannot properly hear his teacher, nor can he properly read from the blackboard. It is our duty to discover these facts, and hundreds of such cases have been discovered, to the credit of the child and with the thanks

of the teacher. Is our department of any benefit to the city schools?

I have in mind the case of a little child—a little flaxen-haired girl. I remember her because she was most beautiful to look upon. Her parents were educated, refined people, willing to do everything in their power for her. She had been extremely healthy, but as time went on her teacher noticed that she was beginning to lose interest in her work, also in her play. Our attention was called to the child and on examination a heart lesion was discovered; but the beginning of a serious condition had it not been discovered in its incipency. The parents were notified and the child was properly cared for. I mention this case as an example, as we see not only a few but hundreds of such cases, when the parents are in ignorance of such conditions. We feel that in discovering these facts we are not benefitting ourselves, but are helping the present generation and the generations to follow.

I was impressed the other day by an article which appeared in one of our magazines. I think it appropriate to mention at this time because we, of a free-born nation, are apt to hurry through life forgetting those about us, and remembering only ourselves.

The article mentioned that in one of the eastern penitentiaries, after entering within its chilly walls and after the iron door had been closed, these words met the gaze: "All who enter here leave hope behind." An unfortunate young girl was sentenced to this penitentiary, for forging a check in order to pay the mortgage on her mother's little home, which she was about to lose through failure to make her payments. As the great iron door closed behind her and she passed within the gray, chilly walls, she read those disheartening words, "All who enter here leave hope behind."

A visitor chanced to be present on her admission to the penitentiary, and on returning six months afterward he enquired about the girl. As a first thought, he raised his eyes to read the words which meant so much to the unfortunate people who were compelled to remain incarcerated. But in their place he read the following:

"Hope is within as well as without,
Behind we have left only fearing and
doubt.

God is the God of the bond and the free,
God is the Father of you and me."

The visitor inquired the meaning of this sudden change and was told by the warden that the angel of mercy was none other than the unfortunate girl, who technically had done a wrong. She had through her tenderness and love changed prison and prisoners from a cheerless past to a cheerful future.

I often think as I visit the different schools and see the numbers of afflicted children whose school work is a drudgery to them, that incarceration in the school room is as bad as a prison for them; and this caused by the fact that certain physical and mental conditions exist through inheritance, mode of living and care at home, improper food, lack of exercise, and "last but not least," the inability of the parent to recognize certain defects, which no doubt, in many cases, can be remedied by proper medical care.

As the unfortunate girl worked for the betterment of jail conditions and gave the inmates cheer, so is our staff trying to better the conditions of our school and school children—give hope to those within as well as those without.

Educating the child and the parent—the parent to care for its child so that the child may be a better man physically, to care if need be for the parent in later years.

As we study the criminal and look at him with his hardened features, we

stop and wonder if he always looked that way. If we could follow him back to the cradle, no doubt in many instances the loving mother fondled the then innocent babe. As we trace him from babyhood to boyhood, and then to manhood, we wonder why such a change. Can it be possible that the same hardened criminal was once the innocent babe? Why the change brought about in so short a space of time? Is it the fault of the father or mother? Surely the child himself cannot be entirely to blame.

The criminal child after a careful analysis and complete physical examination will, in a great majority of cases, show some defect which is at least partially the cause of the criminal tendencies. Can you blame the child for going astray, who throughout life from babyhood to manhood is struggling to live, striving continually to combat disease, when he looks about him and beholds the well man, apparently at ease? Naturally, as he fights disease alone, without help from home or elsewhere, there is bred in that individual a desire to do wrong to others as disease has continually done wrong to him. These are some of the things which our department is trying to prevent.

We are living in an age of progress when man is continually reaching out for something different, the ambitious not satisfied to rest at ease. We have our different religions, and in this nation of free speech are allowed to worship our God as our consciences direct us.

We have our different schools of medicine; also certain sects who claim to heal without the use of drugs. I do not at this time wish to enlarge upon my views as to the drugless method of cure, nor do I wish to debate on the value of medicinal or non-medicinal modes of treatment. Our department is simply an advisory board, maintained

by the Board of Education for the purpose of discovering lesions, and advising the parent of the presence of the same in the child. So far as we at present are concerned, our interest extends to the limit of finding these conditions, and by educational procedure impressing the parent with the necessity of caring for the dependent child.

As we pass from school to school, visiting thousands of children and parents in the course of a school term, some of us with children of our own, we cannot but be impressed with our mission. It is a well-known fact that the present generation is far below par in physical perfection in comparison to the generations of the past. And why is it? Through the anxiety of our fathers and ourselves to accumulate wealth, we have forgotten the necessity of protecting our health. We are trying, in our meager way, to remedy this evil—educating child and parent to care for themselves and their own.

As we study the child from the time of its birth to its entrance into school, and then into manhood, we cannot but realize that each individual has its own peculiarities and is itself distinct. As we watch the baby first distinguishing light, then appreciating the presence of father or mother, we cannot but feel that the majority of babes are born with an equal amount of intelligence. But as they advance in years and the traits of intelligence are tried by contact with other children, then is the time that we feel that the child should be closely watched. If physically weak, an attempt should be made to bring the child as near par as possible. This is what we are doing in our city schools. We do not devote our time entirely to

the older, developed child, but begin in the Kindergarten. If there be defects in the child the parent is made cognizant of the fact.

Our Department of Health is here and established. Each year it has grown, through developing from a mere slip to a fine grown plant. It is a comparatively new departure in California, but for years has been established in the majority of our older Eastern states.

We have had our discouragements from the beginning, and expect to have them now and in the future. But individuals may come and go, yet the roots of the plant will continue to grow, and from its seeds of virtue other plants may spring up in this state and other distant lands; an aid to the child that is to be.

To those present I wish to make this plea. If you believe in our work, carry the good news to those in your homes and abroad. If you do not believe, be sure that you understand our work before you criticize us. Live, learn and listen. If we are doing wrong tell us so. We wish to do right. We cannot all think the same, but the one idea, the upbuilding of our great nation is a unit with us all. Home, City, County, State and Union. Home, the palace of our own domain; City, the home in aggregate; County and State, but a step further—Union. Home, City, County, State, its strength depending upon the physical and mental condition of its inhabitants.

This is my final plea to you today—stand by; give us your encouragement as we are trying in our unselfish way to aid the educator by making the child more physically perfect.

Consolidated Realty Building.

IOWA METHODS OF ROOM DISINFECTION.

BY DR. GUILFORD H. SUMNER, SECRETARY IOWA STATE BOARD OF HEALTH.

Formaldehyde Disinfection of Premises.—For every 1,000 cubic feet of space to be disinfected the following materials and quantities shall be used:

Formalin (40 per cent. solution of formaldehyde)	11 ounces
Water	11 ounces
Potassium permanganate (fine crystals)	9 ounces

Before beginning disinfection the requirements as prescribed in the following sections should be complied with:

The person employed to do the disinfecting should wear a cap and gown so constructed as to completely cover his clothing and shall cover his face with a piece of gauze. After all the arrangements have been completed, these garments shall be left on the premises to be disinfected in the same manner as other disinfected articles. The shoes worn by the operator should be covered with a pair of rubbers, otherwise they should also be disinfected with the other garments.

The illustration shows the cap and gown, and manner of covering the face. This is a simple method whereby one may properly prepare himself to enter a home where a contagious disease exists. Extreme care should be exercised in this regard.

All holes, cracks and other external apertures should be sealed by pasting over them pieces of paper or filling them with clean, damp, cotton rags.

All bedding and other clothing, carpets and rugs should be hung on chairs, or upon lines stretched across the room for that purpose. Books should be placed on edge or hung upon a line in such a manner as to spread the pages. Drawers, cupboards and trunks should be opened and while their contents need not be unnecessarily disarranged they should be loosened in such a manner as to give free access to the disinfecting gas. Windows should be securely closed, but left unlocked in order to admit of their being opened from the outside after the disinfection is complete.

When using formaldehyde, no open vessel containing water should be left in the room.

The temperature of the room must in no case be below 60 degrees F. (preferably 70 degrees F. or above). If the atmosphere is unusually dry, the amount of moisture should be increased by boiling a kettle of water in the room, or by pouring boiling water from one vessel to another for five or ten minutes before beginning the disinfection. A large washtub should be placed near the center of the room, conveniently situated so as to be seen through one of the windows. In this should be placed a tin or galvanized iron pail about twelve to sixteen inches deep. It is advisable to cover the outside of the pail with asbestos paper, leaving the top open.

When the room or house to be disinfected has been properly prepared in accordance with the above requirements, the proper quantity of potassium permanganate should be placed in the pail. The solution of 40 per cent. formaldehyde mixed with the water should be placed in a tin dipper or other vessel convenient for pouring rapidly, and when everything is in readiness should be poured upon the crystals of permanganate of potash contained in the pail. The operator should immediately leave the room, closing the door and stopping all cracks in the manner indicated. This operation should be performed quickly, as the gas is generated very rapidly. The door should be locked in order to prevent accidents, and the room or building, as the case may be, kept closed for at least eight hours. At the expiration of this time the windows should be opened from the outside, and in the space of fifteen or twenty minutes the door may be opened, allowing the air to blow through the room. If the odor remaining is very strong, a little ammonia-water sprinkled upon the floor will soon neutralize the formaldehyde and hasten the disappearance of the odor.



After the fumigation as prescribed has been completed, all bedding, clothing, etc., that will not be harmed by boiling, should be boiled for at least half an hour. When possible, mattresses, rugs and heavy curtains should be sterilized by steam under pressure at 120 degrees C. for thirty minutes. When this is not possible, these articles should be taken out of doors and thoroughly aired and exposed to the rays of the sun for an hour or so. Papers, cheap books, rags and other articles of little or no value should be burned.

In addition to the above requirements all woodwork, and, if possible, the walls should be washed with a liquid disinfectant, such as a solution of bichloride of mercury, one part of bichloride of mercury to 1,000 parts of water. Where the wall paper is loose or dilapidated it should be removed and burned.

All cabs, boats, hearses, and other vehicles used in the removal of a patient or the body of a person affected with, or who has died from any contagious or infectious disease, should be disinfected in the manner described.

Remove all cushions, curtains and other accessories and place them in a small room or tight cupboard, and disinfect them in accordance with the requirements prescribed in Rule 4 of this chapter. If the vehicle can be closed up it should be fumigated in the same manner as room disinfection is done. If this is impracticable, it should be washed inside and out with a solution of bichloride of mercury, one part to 1,000 parts of water.

Standard Disinfectants.—(All should be plainly labeled "Poison.")—Solution No. 1.—Carbolic Acid. Take 95 per cent. carbolic acid, one-half pint; water, five quarts. May be used for sputum cups, washing furniture, metal surfaces, various secretions and exudates.

Caution.—This should not be used for the face or delicate skins.

Solution No. 2.—Carbolic Acid (2½ per cent. solution). Mix one part of Sol. No. 1 with one part of water. May be used for washing hands, face or hair.

Solution No. 3.—Bichloride of Mercury Solution, 1 to 1,000.—Prepare by dissolving one drachm (60 grains) of corrosive sublimate in one gallon of boiled soft water. The ordinary solution of bichloride of mercury deteriorates in a very short time. A convenient way of using bichloride is by the use of specially prepared tablets which may be purchased at any drug store, or to have on hand a stock solution which will not deteriorate. This may be prepared as follows:

Bichloride of mercury.....	330½ grams
Citric acid	156 grams
Water.....	20 liters or 5 gallons

A little coloring material.

M. Sig. One ounce of this solution mixed with one pint of water makes a solution of 1 to 1,000.

Prepare in a glass, earthen or wooden vessel (not in a metal vessel). It must not be used for disinfecting metal surfaces. Use for disinfecting hands, clothing, woodwork, discharges, etc. Good for sprinkling floors of offices and public buildings before sweeping.

Solution No. 4.—Bichloride of Mercury 1 to 3,000.—Mix one part of Sol. No. 3 with two parts of water. May be used for bathing entire body. Be careful about eyes.

Solution No. 5.—Chloride of Lime.—Dissolve six ounces of fresh chloride of lime (best quality) in one gallon of water. Especially useful for feces, urine and sputum.

The Sulphur Method: Obtain at any chemical or grocery store at a cost of a few cents a pound of sublimated or common flour of sulphur. Pour this material within an iron pot in the form of a pyramidal or conical heap (an old frying pan will do very nicely for this purpose) and set this vessel within a



dishpan, the bottom of the latter being covered with water to the depth of an inch or more. Place the dishpan holding the iron receptacle into which the sulphur is poured upon two or three bricks laid flatwise upon the floor, as shown in the photograph.

Now remove from the room all colored fabrics, such as curtain hangings and draperies, and hang them upon the clothes lines in the rear yard where the sunlight may destroy by its natural antiseptic functions tubercular and other disease germs. Remove any silverware that may be in the room to another part of the house, as the sulphur fumes are likely to tarnish it, though not otherwise injuring it. It is best not to leave the colored fabrics in the room on account of possible bleaching from the sulphur fumes.

Open all the bureau drawers, turn the mattress sidewise on the bed, close the hot-air furnace radiators, if there be any, put paper in the keyholes, and otherwise stop up cracks or crevices.

Pour about a teaspoonful of wood or grain alcohol on the top of the pile of sulphur, as shown in the photograph, apply a match, and retire from the room, closing the door tightly. Allow the pound of sulphur to be completely consumed and do not enter the room for at least six hours after such procedure. At the expiration of this time enter the room and throw wide all the windows. Replace your colored draperies or curtains upon the windows and you may sleep safe and sound in the room after the fumes have been

dissipated, with the full knowledge that all disease germs, roaches, bugs and other vermin have been destroyed and the sleeping apartment rendered beneficial and safe from a health standpoint.

If the room should be a large one it would be well to utilize two pounds of sulphur, but for the ordinary sleeping apartment a pound will suffice.

The pound of sulphur may well be likened unto the trite, old-fashioned proverb that a pound of prevention is worth a ton of cure.

In no case is this method of fumigation to be used instead of the formaldehyde method or where death has occurred from tuberculosis.

This simple method is given in the belief that every housekeeper will use it to the extent that all sleeping apartments, closets where clothes are kept, and such other rooms as require fumigation at house cleaning time will be fumigated in this manner to prevent contagious and infectious diseases from entering the home. The formaldehyde method should be used in all places where quarantine has existed or where a death has occurred from tuberculosis.

The photograph here given furnishes an excellent illustration of the plan to be pursued, and if no other method is adopted for fumigation and disinfection of second-hand clothing or goods offered at rummage sales, this method should be used; but in all cases the formaldehyde method is far superior to any other method now known.

DEATH IN THE MINES OF AMERICA—REASONS FOR A FEDERAL COMMISSION.*

BY JOHN RANDOLPH HAYNES, M.D., LOS ANGELES.

QUESTIONS AND ANSWERS.

Question.—Is the situation serious enough to demand federal legislative action?

A.—Yes; within a period of 20 years more than 30,000 miners have been killed and more than 80,000 have been seriously injured in American coal

*Abstract of paper read before the joint session of the American Economic Association and American Association for Labor Legislation, Washington, D. C., Dec. 30, 1911.

mines. Moreover, the death rate in American mines has increased year by year from a rate of 2.67 deaths per 1,000 miners, in 1895, to 4.86 in 1907, while in the same period the rate has decreased in every European country—from 2.54 to 1.94 in Prussia; from 1.49 to 1.29 in Great Britain; from 1.07 to .84 in France; from 1.40 to .94 in Belgium.

Question 2.—Would legislative action better conditions?

A.—Yes; European experts agree that the decrease in the death rate in European mines has been due to the enactment and enforcement of stringent safety regulations by their national governments, and a commission of three of the most eminent European experts, after examining representative American mines at the invitation of our government, has recently stated in its report that American mines under strict governmental supervision, could be made certainly as safe, and probably even safer, than European mines. Director Holmes of the Federal Bureau of Mines, declares that three-fourths of the deaths and injuries in our mines are quite preventable and wholly unnecessary.

Question 3.—Have we not already an efficient Bureau of Mines?

A.—Yes; and an efficient director at its head, but this bureau, while it has done invaluable work in investigating the causes of mining fatalities and methods of prevention, has no power either to enforce its own findings, or to order into practice the regulations which European countries have found so effective in saving life. It is purely an advisory body; after an explosion resulting in perhaps the loss of hundreds of lives, it can investigate the causes; but it cannot go to the mine owner before the explosion takes place and compel him to take preventive measures. Thousands of mines in the United States today are operated under

methods that would not be tolerated for a moment in any European country. Almost everywhere in America are found conditions of negligence regarding safety lamps, for example, or the character of mining powders, or the presence of dry coal dust, or the employment of ignorant mining superintendents, or other conditions which amaze European experts, who can only express astonishment that the record of our mining casualties is not even more terrible than it is.

We must have a mining tribunal with power to **prevent** accidents; not merely to investigate them after they occur.

Question 4.—Cannot the remedying of these evils be safely left to the action of the individual states in which the mines are situated?

A.—No; for experience has shown that state regulation is inefficient. Certain states, it is true, are more careful of the lives of their miners than are others. For example, in the 20-year period ending in 1908, the rate of mining fatalities for the whole country was 3.11 per 1,000 miners employed, while in the East Central section comprising Western Kentucky, Indiana and Illinois, the rate was only 2.25 per 1,000 men employed. This is quite high compared with European rates of mortality but low compared with that of most American states. The western section comprising the states of Colorado, New Mexico and Utah, showed a rate of 6.4, the Northern Pacific district, of 7.4, while the single state of Colorado in the year 1910, just passed, has achieved the unenviable record of killing 21 out of every 1,000 miners employed in that year; more than twenty times the annual death rate of France or Belgium.

In Pennsylvania, where the number of mining fatalities amounts to from one-third to one-half of the entire number occurring in the United States,

there was killed in 1899 one miner for every 215,587 tons of coal mined, and in 1908 one miner for every 167,066 tons, both of course under state regulation. "These figures indicate clearly the need of drastic measures to improve mining conditions," says James E. Roderick, chief of the Department of mines of Pennsylvania, in his report in 1908 to the governor of Pennsylvania.

Do you not think that with such a record it is high time that the Federal Government should regulate the mining of coal in Pennsylvania?

The mines of many of our states are little better than slaughter pens. Federal regulations would impose equal burdens upon all employers; so that the operators in states which safeguard the lives of their miners would not be compelled, as at present, to compete under unequal conditions with the operators of states which do not safeguard the lives of their miners. Under state regulation, as we have seen, the death rate from mining accidents has been steadily increasing. This is due chiefly to three causes: (a) Mining operators complain of anything more than a nominal regulation on the ground that their coal must compete in a common market with the coal of other states produced under less burdensome conditions. (b) It is impracticable for each state to equip and maintain bureaus of investigation and administration of the efficiency easily possible to a single national commission. (c) State inspectors are more subject to political influences in their appointment to and tenure of office, and to the pressure and intimidation of large mining corporations, than are inspectors appointed by a federal commission at Washington.

Question 5.—Precisely what is the character of the commission proposed?

A.—The establishment by congressional enactment of a permanent commission of, say five members, analogous in character to the Interstate Commerce

Commission, which shall have complete power to prescribe the conditions under which coal entering into interstate commerce shall be produced, just as a bureau of the national agricultural department prescribes the conditions under which beef and pork entering into interstate commerce shall be produced; and just as the Interstate Commerce Commission prescribes the conditions under which freight and passengers entering into interstate commerce shall be transported. We have found that the homes of San Francisco and of New York are best protected from unwholesome meats by placing federal inspectors in Chicago and Kansas City. The railroad employes of the country never received any adequate measure of protection until the Federal Interstate Commerce Commission took in charge the duty of enacting and enforcing safety regulations. In the single matter of bringing about the compulsory use of automatic car couplers the Federal Interstate Commerce Commission has been the means of saving the lives of many thousands of railway employes. The proposed interstate mining commission would in the same way safeguard the lives of the 800,000 miners of the United States.

The membership of the proposed commission, to be appointed by the President, would consist of three scientific men selected for their special eminence in the field of coal mining; one practical coal miner and one business man of experience in the mining and marketing of coal. This commission would be empowered: 1—To pass and enforce regulations protecting the lives of the miners. 2—To appoint its own inspectors to see that these regulations are carried out. 3—To prevent the waste of coal in mining (now nearly one-half) in the interest of future generations.

This federal commission should, of course, have charge of the coal lands owned by the nation—still one-third of

the total area. Protection of the miners in this area can be most effectually secured by retaining the ownership in the hands of the whole people, and operating them either directly by the government, or through leases in which provisions shall be made for safety regulations such as have proven so effective in saving life in European mines; in either case, of course, subject to the supervision and control of the Interstate Mining Commission.

Question 6.—Will the miners approve of such a commission?

A.—The answer goes without saying. John W. Mitchell, for many years president of the United Mine Workers of America, has, without ceasing, raised his voice to arouse the American people to put a stop to this unnecessary killing of our miners, who are helpless to secure the regulations which have proven so successful in Europe and which are so needed here.

Question 7.—Will the mining operators oppose this measure?

A.—Some of them doubtless will, on the ground that the precautions taken in European mines, and which such an empowered commission would order them to inaugurate here, would increase the cost of production and thereby lessen profits. As a matter of fact, in the opinion of leading experts, the increased cost imposed upon production by the introduction of safety precautions would be very slight. Mr. Victor Watteyne, Inspector General of Mines, Belgium, one of the European experts invited by our national government to investigate American mining conditions, states that, in his opinion, the transformation of American mining methods now extremely dangerous, so as to bring about a condition of comparative safety, would be attended by little, if any, increase in the cost of production. He remarks that similar dangerous conditions once existed in France and Belgium, now the safest coal mining coun-

tries in the world, and that the safety regulations which brought about this result were, when first introduced, bitterly opposed by operators on the ground of increased expense. Today, he adds, the operators once so hostile are perfectly satisfied with these regulations and admit that the increase in the cost of production has been trifling in amount.

Mr. Broderick, in his report above mentioned, states as his opinion, that with an additional cost of about one cent per ton of coal mined in Pennsylvania, safety precautions could be introduced which would reduce the number of fatalities one-half. In other words, of the 8,893 miners killed in Pennsylvania in the period from 1899 to 1908 inclusive, the lives of 4,447 miners could have been saved, merely by increasing the cost of coal production to the extent of one cent per ton.

Even if the cost of production should be increased to a greater extent than is claimed by M. Watteyne and Mr. Broderick, humane and broad-minded operators will be willing to assume this extra burden, providing, of course, that it fall equally upon all competitors, so that such expenditures can be charged up to the cost of production, along with labor, freight, etc., and thus be added to the sale price of the coal.

The movement towards employers' liability legislation, which seems to be making rapid strides everywhere, will, moreover, render safety mining regulations more popular among employers; for, if the employer is compelled to pay accident and death losses to the families of the miners killed, the adoption of safety precautions will soon become recognized as an economical business policy.

A strong federal mining commission will throughout the United States serve as a protection to the broad-minded and humane mining employer, and will place him commercially on an equal footing

with his unscrupulous and inhumane competitor.

Is it not intolerable that our mining death rate should be from three to five times as great as that of other civilized nations, and that in the absolute number of miners killed our country should exceed that of the whole world beside? Is it not time that as an enlightened and Christian nation we put an end to this barbaric slaughter of our workers?

Consolidated Realty Building.

THE USE OF THE RED CROSS.

The "California Outlook" printed an article on November 18th, in which was advocated the use of the Red Cross for comfort stations.

The Bulletin of the Los Angeles County Medical Association called attention to the fact that this was a violation of a national law of Congress.

The following letter from Washington is printed, because it gives further information on this subject:

(COPY.)

AMERICAN RED CROSS.

November 2, 1911.

Editor, The California Outlook:

Dear Sir: In the issue of your paper dated November 18, 1911, appears an article entitled "Uniform Mark for Public Comfort Stations," the mark referred to being a Greek Red Cross. In this article it is suggested that the Red Cross be adopted as a universal sign for use on public comfort stations. Those responsible for this suggestion are no doubt ignorant of the fact that such use of the Red Cross emblem "or any insignia colored in imitation thereof," is in violation of a statute of the United States. Recently convictions in the courts have been obtained of those who have violated this statute. I enclose herewith a copy of Section 4

of the Act of Congress of January 5, 1905, as amended by Congress, June 23, 1910.

If you will publish this letter, together with the enclosed copy of the law restricting the use of the Red Cross emblem, you will be rendering a public service and your courtesy will be appreciated by this society.

Yours very truly,

CHAS. N. MAGEE, Secretary.
Room 34, Army Bldg., Washington, D.C.

In 1584, about the time that Shakespeare left Stratford on Avon for London, a work was published entitled "The Haven of Health," the author was Thomas Cogan, a physician and master of the Manchester Grammar School, and he wrote this book for "the comfort of students." It contains much advice which is good, and much that seems strange, but with one of his rules we all agree, for Mr. Cogan says, "To chew our meate well and to swallow it down leysurely is a great furtherance to well digesting of the same. And indeede it is the verie end & purpose why the teeth were ordained."

FECUNDITY OF THE FLY.

"The fight with the fly will be a stiff one," said Sir James Crichton-Browne in an address to the Sanitary Inspectors' Congress in Liverpool recently. "One fly, it has been calculated, will lay 1000 eggs, and must, on the snowball principle, leave 25,000,000 descendants in a season. It is only by systematic attacks on the breeding places that we can hope to rout this multitudinous disease carrier. Tubercular diseases are steadily diminishing throughout Great Britain, and we have good reason to hope they will be altogether abolished in another thirty years."

SOUTHERN CALIFORNIA PRACTITIONER

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This journal endeavors to mirror the progress of the profession of California and Arizona.

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EDITORIAL

SALVARSAN THERAPY—ITS PRESENT STATUS.

It is rare that men of science, such as are represented by the medical profession, become more enthusiastic and optimistic over a newly found therapeutic agent than its discoverer. Ehrlich's early claim for "606" modestly expressed the belief that its introduction would mark a considerable advance in the treatment of syphilis, an advance not due to accident, but to the result of systematic experimental work.

It was not unnatural that following its instantaneous adoption by investigators the world over, and the almost magical disappearance of syphilitic lesions after a single injection of Salvarsan, that over-enthusiasm and premature judgment resulted which led to the belief that a single dose of this arsenical remedy of Ehrlich's would displace mercury as a specific in syphilis.

The many recurrences, relapses and untoward effects which have occurred in almost every observer's experience after the use of Salvarsan, have already disqualified the absolute specific and uninjurious actions of the drug.

Notwithstanding these results, the accumulation of evidence, as shown in the mass of literature bearing upon the subject, points unmistakably to the correctness and conservatism of Ehrlich's claim that the use of Salvarsan has proven to be a marked advance in the therapy of syphilis. It is probably, as one observer states, "the one most potent remedy which can be directed towards retarding—but not absolutely ending—the activity of the spirochaeta infection."

It seems now definitely established that one injection of Salvarsan will not cure syphilis. In the hands of those who have had large and prolonged expe-

rience in its use, two, three and even five injections of the drug are sometimes required to produce permanent clinical results and a negative Wasserman reaction.

While the use of Salvarsan often produces favorable results where mercury has failed, yet it is quite definitely shaping itself into the fact that instead of supplanting mercury and iodine, Salvarsan is invaluablely supplementing them in certain manifestations of the disease, and that when properly used in combination with the older treatment, it offers the most adequate means of treating syphilis.

This drug then should be considered more in the light of a valuable remedy which will act as an adjunct or temporary substitute to the already well-known treatment of lues. D. F.

THE CANAL ZONE AND THE A.M.A.

Attention has already been called in this journal to the fact that the work of members of The American Medical Association has made possible the building of the Panama Canal. By way of illustrating how important the results really are, a brief summary of figures from the October report of the Isthmian Canal Commission is given here:

According to the report, there were at work there 12,316 white employes, and 37,496 colored. Of these 12,316 white employes, 11,839 are from the United States. Among these during the month there were only two deaths, one a man aged 44 years, from chronic nephritis, and a child aged 15 months, from peritonitis. The total death rate among the white employes, of all na-

tionalities, was 7, or 2.03 per thousand. The death rate among the thirty-eight thousand negro laborers was 12.48 per thousand. The death rate in the United States in 1910, for all classes, was 16.1, or nearly 4 more per thousand than among the negro laborers at the Canal.

According to the United States Census for 1910, West Orange, N. J., has the lowest death rate, 8.5 per thousand, and Charlestown, S. C., the highest, 29.7.

In thinking of this very phenomenal sanitary victory, the physicians of Southern California must not forget that two of their public servants, Senator Works and Mr. Blight of the School Board, are actively employing their talents in a warfare upon the medical association which indirectly has made this result, as well as the digging of the Canal possible. Every physician in Southern California should exert his or her influence unceasingly until both of the gentlemen mentioned are retired to private life. E. W.

SPINAL PUNCTURE THE IMMEDIATE CAUSE OF DEATH.

An unusual and very interesting case of death following spinal puncture for diagnosis is reported in The Medical Record, March 18, 1911.

The patient, a child of 16 months, came under Dr. Colie's care after an illness of six weeks, during which the symptoms were: chronic double suppurative otitis media—three minutes duration—and occasional vomiting. Treatment had been for gastro-intestinal infection. Toward the close of the first week of Dr. Colie's care the

diagnosis of cerebral meningitis was made, and the child became comatose. About 10 c.c. of clear spinal fluid was obtained by the usual method. Within five minutes spastic rigidity of all muscles developed and continued until the child was black from asphyxia, when relaxation occurred and breathing began. After alternate repetitions for an hour of these phases of spastic rigidity and sequent relaxation, death occurred.

The autopsy findings were: a very large amount of purulent fluid in the cerebral cavity, sero-pus in both middle ears, and recent meningitis, but no evidence of any communication between the ears and the brain. The brain was hardened for section which revealed a large and old abscess in the left frontal lobe and very extensive softening of the entire left hemisphere.

Dr. Colie's analysis is that the removal of the spinal fluid was followed by a degree of pressure upon the medulla oblongata into the foramen magnum, which caused an anaemia of the medulla, with the alternating phases of spastic rigidity, asphyxia, general muscular relaxation, and finally death.

The report confirms the fact, already established, that death may immediately follow spinal puncture. The fact that the spinal fluid was clear and the cranial cavity distended with purulent fluid shows that the usual routes of cerebro-spinal drainage were closed. The symptoms present justify Dr. Colie's conclusion that the removal of the ten cubic centimeters of spinal fluid permitted the fatal pressure of the medulla into the foramen magnum.

The case illustrates in a very striking manner conditions under which spinal puncture may be hazardous.

E. W.

TOXINS IN THE MILK OF SLOP-FED COWS.

Those who believe that toxins may be formed in the milk of cows which are fed upon the waste products of breweries and beet-sugar factories will find confirmation of their opinion in Aviragnet's *Archives de Médecine des Enfants* for December, 1910.

He contends that such milk is utterly unfit for food of human infants, and that the pathogenic factors are toxins produced by fermentation in the waste products from the beets and barley. Sterilization does not remove or modify the products in the milk.

The clinical symptoms in young children are intestinal derangements, diarrhoea, fever, weakness, emaciation, and if the feeding is continued, death. There are possibly real dangers in Southern California, through the waste products of the breweries and beet-sugar factories. It may be possible that immediately after these waste products are discarded by the makers the toxins have not developed, and will not develop if fed to cows at once; but such facts are not proven, and good judgment demands that all milk from the sources named should be absolutely condemned.

E. W.

SO. CAL. MED. SOCIETY MEETING AT SAN DIEGO.

The forty-fifth semi-annual meeting of the Southern California Medical Society was held at the U. S. Grant Hotel

in San Diego, on the 6th and 7th of December, 1911. The program was as follows:

Wednesday, December 6, 2:30—Call to Order; Reading of Minutes; Reports of Officers; Applications for Membership; Appointment of Committees; Announcement by Committee on Arrangements; Dr. John C. Ferbert, Los Angeles—Tumors of Sterno-Cleido Mastoid; Report Cases. Dr. Eliot Alden, Los Angeles—Surgical Treatment of Hydrocephalus with Report of Case; Discussion by Dr. W. A. Edwards. Dr. Rea Smith, Los Angeles—Surgical Treatment of Abscess of the Liver with Report of 23 Cases; Discussion by Dr. Andrew Stuart Lobingier. Dr. Granville MacGowan, Los Angeles—Report of a Case of Conservative Surgery of Tuberculosis of Both Testicles. Dr. W. W. Richardson, Los Angeles—Fractures; Discussion by Dr. Bernard J. O'Neil, Illustrated by X-Ray Views by Dr. Albert Soiland, Los Angeles—Stereocon Views of Different Fractures.

Thursday a. m. Dr. E. C. Beach, Los Angeles—Physical Examination of School Children with Especial Reference to the Effect of Exercise on the Heart; Discussion by Dr. I. Daniel Webster. Dr. P. V. K. Johnson, Los Angeles—Feeding and Care of the Infants of the Poor; Discussion, Dr. John A. Colliver. Dr. T. R. Griffith, Riverside—Laboratory Methods of General Practitioners. Election of Officers.

Thursday, 2:30 p. m. Drs. H. A. Thompson and H. C. Oatman, San Diego—Actinomycosis, with Report of Case Following Pregnancy; Discussion by Dr. Stanley P. Black. Dr. C. W. Pierce,

Los Angeles—Relation of Certain Pathological Conditions of the Liver and Gall Bladder to Life Insurance; Discussion by Dr. W. W. Beckett. Dr. J. A. Parks, San Diego—Early Diagnosis of Pulmonary Tuberculosis; Discussion by Dr. C. C. Browning. Report of State Committee on Tuberculosis. Dr. H. A. Johnson, Anaheim—Ectopic Pregnancy; Discussion by Dr. J. S. Baer.

Thursday evening. Dr. F. M. Pottenger, Los Angeles—Enteroptosis and Altered Function of the Diaphragm Resulting from Intro-Thoracic Inflammations; Discussion by Dr. W. P. Mills-paugh. Dr. O. O. Witherbee, Los Angeles—Chief Predisposing Causes of Visceral Displacement and Logical Conception of Approved Treatment; Discussion by Dr. Henry P. Newman. Dr. Joseph M. King—Symptomology and Diagnosis Acute Pancreatitis.

The papers were freely discussed, and much benefit derived.

One of the most interesting and instructive features of the program does not appear in the above list. It was remarks, by special request, from Dr. George L. Cole, of Los Angeles, on his recent European trip, with especial reference to the most modern methods of eclampsia treatment.

The following officers were elected for the ensuing year:

Dr. Stanley P. Black, Pasadena, president; Dr. Robert L. Doig, San Diego, first vice-president; Dr. J. A. Stoddard, Santa Barbara, second vice-president; Dr. John A. Colliver, Los Angeles, secretary and treasurer.

The Executive Committee, of which Dr. George L. Cole was chairman, re-

ported Pasadena as the next place of meeting, which will be held May the first and second. An endeavor will be made at this meeting to have the majority of the papers presented of an original or research nature, and later to have them all of this character. There are many excellent scientific men in the Society, and we want your experience. You will confer a favor upon the President and Secretary by communicating your subject to them at once.

Contrary to the general custom we had no banquet at the San Diego meeting, but two especially enjoyable features took its place. These were, first, the informal reception at the University Club Wednesday evening, at which time we were entertained by charming women, beautiful vocal and instrumental music, a witty and humorous monologist; and served with delicious refreshments; and, second, the automobile ride on Thursday morning, when

the visiting members were conducted through the city, over the heights, around the bay, and were introduced to the beauties and grandeur of San Diego and her surroundings.

The Committee on Arrangements at San Diego is to be congratulated upon the smoothness with which their end of the program was carried out, as shown by the hotel arrangements, hall, and special equipment, as well as the delightful entertainment just described. The Secretary takes this opportunity in behalf of the Society, in the Southern California Practitioner, the official organ of the proceedings of our Society, to again thank the San Diego members, and especially the Committee, for the delightful time they gave us.

Following is the composition of the Committee on Arrangements:

Dr. Robert L. Doig, chairman; Dr. Bernard J. O'Neill, Dr. J. A. Parks, Dr. H. A. Thompson, Dr. Fred Baker.

EDITORIAL NOTES

Dr. Bim Smith has opened a private hospital in Hermosillo, Mexico.

Dr. A. Claude Magee has been appointed police surgeon of San Diego.

Dr. E. H. Garret, of Los Angeles, has returned from a trip to New York and Boston.

Dr. H. W. Levensgood, of Long Beach, has returned from a four months' tour of Europe.

Dr. C. W. Bonyngue has removed his laboratory to 423 Auditorium Building, Los Angeles.

Dr. I. B. Hamilton, of Tucson, Arizona, has been spending a few days in Los Angeles.

Dr. C. E. Ide has been elected health commissioner of Redlands vice Dr. Hamilton Forline, resigned.

Dr. C. Van Zwalenburg, of Riverside, has returned from six weeks spent in New York City and vicinity.

Dr. Eugene M. Draper, a retired physician, age 58 years, died at his home in Pasadena, December 28th.

Dr. H. A. Rosenkranz is spending a year in Europe, devoting himself entirely to G. U. and skin work.

Dr. A. J. Murrieta, of Arizona, has been spending the holidays with his family and friends in Los Angeles.

Dr. H. M. Voorhees has returned from New York and Chicago, where he did two months' post-graduate work.

The San Diego Board of Health has appointed Dr. H. A. Thompson city bacteriologist at a salary of \$1200 per annum.

Dr. Francis Delafield, of New York City, the noted throat specialist, and author, is spending the winter in Pasadena.

Chief Police Surgeon, Dr. C. E. Zerfing, has appointed Dr. M. G. Gage to succeed Dr. C. A. Wright as first assistant police surgeon.

Dr. Woods Hutchinson says that a congenial partnership exists between the larvae of the house-fly and the eggs of the hook-worm.

Dr. Edward R. Kellogg, recently of Chicago, is now associated with Dr. Francis B. Kellogg, 618 Auditorium Building, Los Angeles.

Dr. T. Percival Gerson has been appointed one of the editors of the Municipal Newspaper, to be published by the City of Los Angeles.

Dr. John Levert Cooke, formerly a practicing physician and mayor of Brawley, Cal., died in Banning, December 17th, of consumption.

Dr. Thos. J. Orbison was elected president of the Pasadena Medical Society at its annual meeting. Dr. Lewis B. Morton was elected secretary-treasurer.

Dr. Henry Sherry has been elected president of the Pasadena Hospital Association. Dr. H. B. Stehman is associated on the board of directors with Dr. Sherry.

Dr. M. G. Gates, of Los Angeles, and Miss Clara DuBrey, a nurse of the Los Angeles County Hospital, were married in Santa Ana, November 30th.

The Pomona Medical Society, at its recent meeting, elected the following officers: Dr. Lorena M. Breed, president; Dr. N. J. Rice, secretary; Dr. J. K. Swindt, counselor.

Dr. G. E. Ap Lynne, of Santa Paula, has transferred his practice and residence property to Dr. Benjamin E. Merrill, formerly of Philadelphia. Dr. Ap Lynne will locate in Los Angeles.

In an interview in the Los Angeles Herald, November 26th, Dr. Geo. L. Cole stated that large families were only for the rich, and that as a rule two or three children were enough.

Dr. Silas D. Black, age 60, for thirty years a practitioner in Brazil, Indiana, died suddenly of heart disease at his home in Los Angeles, December 30th. He was also well known as an author.

The Fullerton Hospital Association have decided to erect a two-story annex to its hospital building. This institution has been one of the most successful of the smaller hospitals in California.

Miss Augusta Quaade-Nielsen, recently of Copenhagen, graduate in Swedish medico gymnastics and massage, has located in Los Angeles. Her telephones are A2869 and Broadway 9741.

Dr. Edward M. Clinton, assistant surgeon at the Soldiers' Home, Santa Monica, and Miss Etta P. Middleton, a trained nurse, whose home is in Venice, were married by the chaplain of the Home December 24th.

The Maricopa County Medical Society recently held their annual meeting at the Adams Hotel, Phoenix. The menu was fine and everything went to show that the Phoenix doctors are very much alive and up-to-date.

Dr. J. L. Pomeroy has severed his connection with the Pottenger Sanatorium and entered private practice. Dr. Pomeroy will specialize in internal

medicine, with offices in the American National Bank Building, Monrovia.

It is stated in a telegram from Banning, Cal., that during 1911 the Indians in California decreased at the rate of 50 a day. At the time of the American occupation there were in California 210,000 Indians. Now there are 17,000.

Dr. Geo. Wellesley Gates died in Pomona on the afternoon of December 13th in the 55th year of his age. He was a graduate of Harvard Medical School and a member of the Massachusetts Medical Society. His funeral was held at St. Joseph's Catholic Church.

Dr. J. R. Hurley, son of Dr. J. N. Hurley, of San Bernardino, who is in the Philippine Service, has been promoted to the rank of past-assistant surgeon, his promotion dating from May 6th, 1911. His present rank carries with it the salary of captain of cavalry.

Dr. J. A. Reily has been elected medical superintendent of the State Hospital for the Insane at Patton. Dr. Reily graduated from the Homeopathic Medical College of Missouri, class of 1898, and at the time of his appointment as assistant physician at Patton in the summer of 1909, he was a resident of Fulton, Missouri.

Dr. C. J. Creighton died at his home Saturday, November 25th, 1911. The doctor had just returned from a trip to Germany, England, France and Italy. He was born in London, England, in 1842. He graduated from the Rush Medical College in 1879. He had been living in Redlands for 12 years. The funeral services were held in the Catholic Church at Redlands.

The meeting of the Southern California Public Health Association was held in San Diego, December 6th, with Dr. W. Harriman Jones, of Long Beach, as president, and Dr. J. I. Clark, of Santa Ana, as secretary. There was a very interesting scientific program and the

following were elected officers for the ensuing year: President, Dr. C. C. Browning; vice-president, Dr. F. H. Mead; secretary, Dr. J. I. Clark.

Dr. A. G. Schnabel, former Bacteriologist of the City of Tucson, has been appointed Professor of Bacteriology in the University of Arizona, and at the suggestion of Dr. John W. Flinn, secretary of the Arizona State Medical Association, the University will maintain a laboratory for the benefit of the profession and the people of Arizona. The fees for tests and other services in this laboratory will be made as near nominal as possible.

The Riverside County Medical Association held its regular meeting on the evening of December 11th with Dr. C. W. Girdlestone as host. The following officers for the coming term were elected: President, Dr. Karl R. Sleeper; vice-president, Dr. Louise Harvey Clarke; secretary-treasurer, Dr. George E. Tucker. Dr. Tucker and Dr. Sleeper were named as delegate and alternate to the California Medical Association in Del Monte in April.

At the annual meeting of the Los Angeles County Medical Association, Dr. W. Jarvis Barlow, the retiring president, delivered an address giving a comprehensive view of the medical field of today, after which he introduced the new president, Dr. O. O. Witherbee. The other officers are Dr. Wm. M. Lewis, vice-president; Dr. Geo. H. Kress, secretary-treasurer, and Drs. Geo. L. Cole, F. C. E. Mattison and W. Jarvis Barlow as members of the board of councilors.

Dr. Quintus Cincinnatus Smith, of San Diego, father of Dr. H. S. Smith, died October 27th, 68 years old. He had been suffering from paralysis for some time and his death was not unexpected. Dr. Smith was a veteran of the Civil War, and served during the entire four years under Commander Forrest. He was a graduate of the

University of Nashville, Ky., and took his doctor's degree in '67. He has practiced as a physician in New York, in Northern California, in Texas and San Diego.

At the meeting of the San Bernardino County Medical Society, held in Redlands, Tuesday evening, December 12th, the following officers were elected for the ensuing year: President, Dr. C. A. Sanborn, Redlands; first vice-president, Dr. R. S. Gibbs, San Bernardino; second vice-president, Dr. D. C. Stillians, Redlands; secretary, Dr. C. G. Hilliard, Redlands. Dr. B. F. Church was elected delegate to the next meeting of the State Medical Society, with Dr. D. C. Strong as alternate. Dr. P. M. Savage read the paper of the evening, his subject being Carcinoma.

The Seaside Hospital Association, of Long Beach, at its annual meeting elected the following officers for the ensuing year: President, Dr. F. D. Bishop; vice-president, Dr. E. R. Harvey; secretary-treasurer, Dr. Townsend; other directors, Drs. J. W. Wood, A. C. Sellery, L. A. Perce, A. W. Buell, W. H. Newman, A. F. Hamman, and T. L. Rogers and W. F. Pascoe. The annual report showed that 171 patients had been treated in the hospital during the year, and that the gross receipts had been \$8,806.36. The association propose building immediately a new building to cost between \$12,000 and \$13,000.

The Foothill Medical Association, recently organized in Monrovia, met for its fourth meeting December 5th at the

home of Dr. J. E. Hills in Azusa. About 15 members were present and the meeting proved highly profitable. Dr. Frank Neall Robinson read a paper on Tubercular Laryngitis, its Diagnosis Treatment and Symptoms. It was discussed by Drs. Chamberlain and Hoods of Azusa and Drs. Pottenger and Remington of Monrovia, and finally submitted to the meeting for general discussion, which called out considerable valuable experience and opinion. Refreshments and general sociability marked the close of the meeting. The next session will be held January 8 in the office of Dr. Robinson in Monrovia, in the new bank building.

Dr. Charles E. de M. Sajous has accepted the position of supervising editor of the New York Medical Journal, succeeding the late Dr. Frank P. Foster. Dr. Sajous is probably one of the most versatile medical authorities in the United States. He is the author of *Internal Secretions* and *The Principals of Medicine*, which appeared in two volumes, as the outcome of six years' research work in Paris. His editorial experience has been wide. He founded in 1888 the *Annual of the Universal Medical Sciences*, which had a circulation of over 500,000 volumes. He has also been editor for 13 years of the *Cyclopaedia of Practical Medicine*. It would be difficult for any person to maintain the high editorial standards of Dr. Foster, and we congratulate the publishers of the New York Medical Journal on their good fortune in securing Dr. Sajous.

NASAL OBSTRUCTION AND ITS CONSEQUENCES IN SCHOOL CHILDREN.

BY CECIL E. REYNOLDS, M.R.S.C., L.R.C.P., D.H.P., CAMB. HALF-TIME SCHOOL DOCTOR TO LONDON COUNTY COUNCIL; LATE WHOLE-TIME SCHOOL DOCTOR TO THE BERKSHIRE COUNTY COUNCIL.

In the course of routine inspection of school children there are few conditions met with that are of greater importance to diagnose, that present such

frequent difficulty in diagnosis, under the circumstances, or tax one's judgment with regard to advising operation, as do the varying degrees of nasal ob-

struction that daily come under notice. The conditions causing obstruction may be classed as follows in order of frequency:

1. Adenoids (with or without enlarged tonsils).
2. Enlarged turbinate bones.
3. Thickened and deviated septum and spurs.
4. Nasal polypi.

All these conditions are very frequent except polypi, which appear to be by no means uncommon, and almost invariably unsuspected by the parents. With regard to adenoids, and in cases of great doubt, where the parents specially inquire if an operation is necessary or not, it is obviously best to palpate the posterior nares. I always explain to the parents beforehand how painful this is, and obtain their consent. It is obviously a method to be avoided as far as possible in the schools. Posterior rhinoscopy is also out of the question.

When the child has enlarged tonsils there is no need to make an exact diagnosis of adenoids, since an operation is necessary in any case.

In every suspected case it is important to ask if an operation for adenoids has been recently performed, since a mouth breather will not become a nose breather without training or practice. Otherwise, if a child who has not been under operation is an obvious mouth breather, the school doctor may, I think, safely advise operation, without risk of the child being returned to school labelled, "No treatment necessary," even in the absence of other clear physical signs.

Deformities of the chest of the "pigeon breast," "Harrison's sulcus," "keeled sternum," "excavated ensiform," and allied types, are extraordinarily frequent; speaking offhand, I should put them at about 20 per cent. of all children examined, and I believe them all to be accounted for by obstruction

to respiration, past or present—usually present. A few cases only have other signs of rickets.

A degree of obstruction sufficient to deform the chest ever so little is important. Many such cases have, or develop, chronic bronchitis. Likewise, all children who are said to snore, either in bed or at school, or to be deaf, must be carefully investigated. I think that a habit should be formed of looking into the anterior nares as well as examining the throat with a spatula in every case. Gentle pressure on the tip of the nose expands the nostril sufficiently to give a good view of the inferior turbinates and of any polypi that may be present as well as the septum, without using any sort of speculum. Of the tests other than palpation to be applied to the posterior nares the first is obviously to close each nostril separately, by pressing a finger on the ala nasi, and make the child inspire and expire through each nostril, with the mouth tightly closed. It is difficult to gauge the freedom of entry of air, but it is easy to feel the blast of air on the back of one's hand during expiration, and to gauge its volume and force. It is important to observe the effort required during inspiration, but care must be taken to prevent the outer wall of the nostril being sucked in, and so acting as a valve, by again keeping gentle pressure on the tip of the nose with one finger. In many cases the effort of drawing in air through an obstructed nostril quite puts the child out of breath, so that he involuntarily opens the mouth, when the observer says to him, "Now blow out through your nose."

In applying this test it is necessary to remember that the child is taught in school to expire through the mouth, so that it must be made clear to him that on this occasion he is required to breathe in and out through the nose. The effect of the special training, which

he endeavors to act up to when under observation, is also apt to deceive in that class of case in which a child with well-formed face and firmly-set mouth appears to be breathing quite properly through the nose for the benefit of the doctor examining his chest. In such cases attention is first called to the nasal obstruction by the almost complete absence of breath sounds, even over the right bronchus. One is apt at first to suspect early phthisis, which, amongst the small percentage of cases in school children, frequently commences at the hilus of the lung, until the child is told to breathe quietly through the mouth, when the breath sounds become as puerile as usual. In many cases in which my suspicions have been aroused by the above observation in normal-looking children I have explored the naso-pharynx and found abundant adenoids.

I have found wide, roomy nostrils with chronic rhinitis and discharge to be a not infrequent concomitant of adenoids, especially in children not obviously mouth breathers. In these cases the expansion of the nostrils appears to be due to an effort to increase the breathing space and allow air to creep in around the obstruction, and ozaena eventually supervenes. Enlarged turbinates are also common in these cases, but whether they are the cause or the effect of the expanded nostril and unventilated space I am not prepared to say.

I have seen cases of badly deformed chest associated with enlarged tonsils in which there were no adenoids or other form of nasal obstruction present at the time of observation; but enlarged tonsils have a much more common and more serious effect upon the child's future than this. By far the larger number of valvular lesions of the heart that have come under my notice during the past three years have been associated with enlarged tonsils.

Some of these tonsils have openly declared themselves as the harbingers of rheumatism, scarlet fever, diphtheria, etc., but very many have simply remained the cause of periodical sore throats, and have admitted a most insidious attack upon their owner's hearts by being a nidus for various forms of cocci. This point should be impressed upon parents. I have urged a parent one year to have her child's tonsils removed, and on revisiting the school the following year found that nothing had been done, but that the child had meantime developed very serious valvular lesions, although it was asserted that the child had suffered no illness "to speak of."

I have dwelt on the subject of adenoids because I think it is necessary to point out to those who may be commencing the work of school inspection that:

1. Every deformed chest must be accounted for.

2. Because a child breathes apparently normally through his nose when standing up during the day, it does not follow that he will breathe equally well lying down, when the mucous membrane swells and the muscles relax.

3. Nocturnal mouth breathing may give rise to serious dyspeptic trouble, owing to the growth upon the tongue of colonies of sugar-fermenting organisms which are subsequently swallowed at a time when the stomach is least able to resist them, namely, in the early morning before breakfast, as I have previously pointed out.

As a matter of general interest, I may mention four points of comparison between the London and the Berkshire school child:

1. London teeth are incomparably better.

2. London nutrition is much inferior.

3. Enlarged tonsils are less frequent.

4. Phthisis is more common.

But I must add that my experience

of the London school child is almost restricted to Bermondsey, Rotherhithe, and Camberwell.

The following general instructions to all parents I have found useful:

1. Keep the bedroom window open, but allow enough bedclothes.

2. Let the child wear a woolen vest if possible.

3. Bathe the chest and throat with cold water every morning.

4. Make the child use a toothbrush and shaving soap all round the teeth every night **at least**.—British Medical Journal, September 2, 1911.

American Medical Association of Vienna.

October 30th, 1911.

Editor Southern California Practitioner:

My Dear Doctor.—A few of my friends have desired me to give them information on the clinical advantages to be obtained here at the present time and the cost of the courses and of living. I can more fully answer all through our home journal, if you will please grant the space. I find quite a change since my attendance here twenty years ago for the better. The A. M. A. of Vienna has done a great work towards classifying the time, subjects, the number attending classes, at the same time specializing and choosing the professor or doctor who gives instructions.

This society has a marked control on the teaching department of the clinics because of the great number who attend from America (more than from any other nation) and this society invites and has many members from other countries.

The great abundance of clinical material, the absolute control of the patient by the professor, the written consent of the patient to have a post-mortem should he die while in the hospital,

the number of hours the teachers devote to these clinics, and to teaching each day, and the majority of them instructing in English, is why the classes are so well attended.

After an attendance here at this time of nearly three months, having taken fourteen different courses of twenty hours each, usually taking one hour each day, I find it is best not to devote more than six or seven hours each day, because of the advantages of attending operations where there are several in each department daily. Especially I am speaking of the eye, ear and nose departments, as here I attended and found that every teacher speaks English. In medicine, pathology, skin, etc., not so many of the instructors speak English. While here I find from five to fifteen post-mortems are held each morning from 8 to 11, and it seemed the pathological specimens could not be excelled. As I have said, these instructors spend so many hours in clinical work, few have large private practices, and indeed I have heard three of them say they wished they could devote all their time to instructions and work within the hospital. All operations in the general clinics are free.

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BOOK REVIEWS

MEDICAL SYMPOSIUM SERIES, NO. 1. Recent Studies of Syphilis with special reference to Serodiagnosis and treatment. (Second edition revised). A reprint of articles published in the Interstate Medical Journal. St. Louis: Interstate Medical Journal Co., 1911.

This volume is a most commendable one, and its scope is very well covered by the following quotation, which is taken from the "Foreword:"

"Cognizant of the importance of the subject of syphilis and the fact that but few American physicians had had access to the latest European literature, the editors of the Interstate Medical Journal deemed it advisable to issue a 'special syphilis number' for January with particular reference to serodiagnosis, and to treatment with the Ehrlich-Hata arsenic compound, dioxymido-arsenobenzol. The articles collected in the brochure appeared in the special number, but, on account of the regular edition having been exhausted soon after publication, this volume is issued as a reprint with the addition of several allied articles published in October, 1910."

On page 22 under the "Status of Noguchi Test," Wasserman makes the following terse statement: "The quantity of the blood required for my method is nearly one-tenth of that needed for the Wasserman. The time and labor for carrying out my method is very much less than for the Wasserman."

Wolbarst of the Central Islip State Hospital; Professor of Genito-urinary diseases, New York School of Clinical Medicine, contributes a very interesting article on the Treatment of Syphilis with Salvarsan.

The article as a whole is very laudatory in its praise of the action of Salvarsan, but it is to be regretted that the article was not prepared after a more lengthy experience in the use of Salvarsan, as he says in his article that "it

is now six weeks since I gave my first injection."

On page 90, Corbus of Chicago says that "Herxheimer and Michaelis both report post-mortem examinations on babies that had died following injections of '606;' they attribute the death as not due to the direct action of the substance, but to the action of the endotoxins produced so suddenly as to absolutely annihilate the little patients. In none of the organs, only excepting the lungs, could any spirochaetes be found, whereas only a few degenerated forms were found in the latter organs."

On page 173 in "A Review of Recent Literature," occurs this statement: "Most of the cases recorded as due to '606,' French feels, would have been more rapidly effected by the use of mercury or potassium iodide, which would have been a far more potent factor in preventing relapses and tertiary manifestations. The number of casualties due to Salvarsan—fourteen deaths in infants and seventeen in adults—seems to him also to warn of the danger of the drug."

Perhaps the article of most real value in the volume is that by Prince A. Morrow, of New York, on "The Sanitary Supervision of Prostitutes." It comprises about ten pages and the reviewer could wish that not only every physician in the land, but all lay people who are interested in the subject, might have access to it.

In speaking of the relations of venereal diseases to the public, the following paragraph gives the cue to his line of thought concerning the suppression of prostitution:

"First of all the antiseptic principles of publicity should be applied to these diseases, the public should be enlightened as to their extent and their dangers,—both to the individual and to so-

ciety,—and the laws of their contagion. Publicity of these evils is the first requisite; the public must recognize their existence and understand their significance in order to create a public opinion which shall sanction and sustain all measures adjudged necessary by the sanitary authorities for their effective control. I believe that the co-operation of the public waits upon this enlightenment."

G. L. C.

GOLDEN RULES OF PEDIATRICS, APHORISMS, OBSERVATIONS, AND PRECEPTS ON THE SCIENCE AND ART OF PEDIATRICS. Giving practical rules for diagnosis and prognosis, the essentials of infant feeding, and the principles of scientific treatment. By John Zahorsky, A.B., M.D., Clinical Professor of Pediatrics, Medical Department Washington University, St. Louis; President of the St. Louis Pediatric Society; Attending Physician to the Bethesda Foundlings' Home and the St. Louis Children's Hospital; Member of the American Medical Association and St. Louis Academy of Science; Author of "Baby Incubators," etc. With an Introduction by E. W. Saunders, M.D., Emeritus Professor of Diseases of Children and Clinical Midwifery, Medical Department Washington University, St. Louis, etc. St. Louis: C. V. Mosby Company, 1911. Price \$2.50.

This book is full of what might be called Pediatric Aphorisms. The first one given is an important one and reads, "Practice the quiet manner and the gentle voice." There is no better evidence of culture than the well-modulated voice.

Under Physical Examination, the first rule is, "Remember that inspection is the most valuable of all means employed for physical examination. Learn to look for abnormalities." In speaking of Palpitation, the author says, "Learn to feel things." Under Enanthemata, "Don't forget to examine the mucus membrane of the mouth under a strong light preferably day light, whenever any eruptive disease is suspected." Under Abdominal Swelling, he says, "Do not mistake an over-filled bladder for an abdominal tumor." A recurrent fever coming on two or three times a year and lasting a few days is most likely tonsillitis." Under The Nursing

Mother, the author says, "There is no proof that any food which is good for the nutrition of the mother harms the baby." Under Diphtheria, he says, "First forget that diphtheria antitoxin never causes heart paralysis."

The book is full of good things, but we cannot quote more.

CASE HISTORIES IN MEDICINE. Illustrating the Diagnosis and Prognosis and Treatment of Disease. By Richard C. Cabot, M.D., Assistant Professor of Clinical Medicine, Harvard Medical School. Second Edition, Revised and Enlarged. Price, \$3.00. Boston: W. M. Leonard, Publisher. 1911.

This volume is the fourth of the Case History series. One hundred case histories have been selected to cover well the field of general medicine. These have been classified in nine chapters under the headings Infectious Diseases, Diseases of Gastro-Intestinal and Biliary Tract, Diseases of the Urinary Tract, Diseases of the Circulation, The Respiratory System, The Nervous System, etc. A final chapter, Notes on Drug Therapy, is of marked interest.

Dr. Cabot states that he has prepared this book with practitioners primarily in mind, and that he has gone into details of Prognosis and Treatment, "what the patient and his family want, more thoroughly."

The author's experience as a teacher of post-graduate, as well as undergraduate classes, and his well-known success in the use of the Case History method lead us to expect what we actually find in the book, an interesting and valuable post-graduate course in General Medicine.

A practitioner, by turning to this, can get all the details of a case, along the line he may at that time be most interested, just as though he were attending a clinic in Boston. Dr. Cabot goes carefully into the treatment of syphilis, giving all the details of the use of Salvarsan. These 100 cases com-

a large goitre has been removed, and no matter how much the trachea is handled, the anaesthesia continues smoothly and evenly. Intratracheal anaesthesia should be very advantageous for the operation of laryngectomy. The intratracheal tube could either be introduced through a tracheotomy wound and the trachea packed with gauze above this point, or the tube could be passed through the glottis in the usual manner, and removed only at the moment when the trachea is to be divided across after the entire larynx is free.

We have found that operations upon the face and jaws and mouth, where the buccal cavity or pharynx has to be invaded, are made more easy and safe when done under insufflation anaesthesia. No blood or secretions can run down the trachea, for the out-flowing current passing upward in the trachea blows out any fluid that might run down into the larynx.

In operations upon the brain and spinal cord where the patient must often be placed in the prone position, the anaesthesia is very useful. As soon as the intratracheal tube has been introduced and the insufflation has been begun, the patient's head and body can be placed in any position desired and the anaesthesia given from a distance. The anaesthetizer need not be seated underneath the table as is ordinarily necessary.

EXPERIENCES WITH INSUFFLATION ANAESTHESIA IN THORACIC SURGERY.

Insufflation anaesthesia is a positive pressure method and was primarily suggested for intrathoracic surgery. On account of the simplicity and apparent safety of the method it may take the place of all the more complicated positive and negative pressure cabinets. The operations upon animals gave such very satisfactory results, that we were very hopeful that the method would

give as good results in thoracic operations in the human being. We were very careful in our first human operations, but, with increasing experience, have gained more and more confidence in the efficiency of insufflation in man.

He gives his experience on nine human patients. Case II: John H., 52 years of age, admitted to Mt. Sinai Hospital on January 2, 1911, with the history of increasing difficulty in swallowing for ten months. He had lost 40 pounds in weight and was able to swallow only small quantities of fluids. The stomach tube was arrested 12 cm. from the teeth, and an X-ray picture taken after the ingestion of bismuth showed a marked narrowing of the oesophagus at this point.

On January 7 the patient was anaesthetized with ether in the usual manner, a catheter No. 24 French introduced into the trachea, and intratracheal insufflation begun. The patient was turned on the right side, and an incision was made in the seventh intercostal space from the costal cartilage in front to the angle of the ribs behind (Dr. Elsberg). The incision was deepened through the muscles until the pleura was exposed. The lungs were now momentarily collapsed while the incision in the pleura was made. The ribs were now drawn apart by means of the rib spreader and the left pleural cavity widely exposed. The lungs were of a mottled pink color and moderately distended (pressure 30 mm.). Pulse slow and of good quality; very superficial respiratory movements. The lung was now carefully drawn toward the medium line and the pericardium exposed; this was also drawn to the right so that the root of the lung was visible, as well as the aorta and the oesophagus with the left vagus nerve.

About five inches above the diaphragm there was a hard nodular tumor of the oesophagus of the size of a large plum. There were no enlarged

glands at the root of the lung. The tumor was free on all sides excepting where it lay against the aorta. The attempt was made to free it from its attachments to the aorta, but this was found impossible without great danger to the wall of the vessel. The tumor was, therefore, considered inoperable.

The incision in the pleura was closed by a fine running catgut suture, with interrupted sutures of strong catgut around the adjoining ribs. When the last stitches in the pleura were being passed, the anaesthetizer was instructed to raise the pressure to 50 mm. of mercury, so as to distend the lung and expel as much air as possible from the pleural cavity. Then followed suture of the intercostal and pectoral muscles and skin in the usual manner. Large vaseline gauze dressing.

During the entire operation, which had lasted 57 minutes, the patient was in good condition; color of face pink, breathing superficial, pulse of good quality. Insufflation of pure air for three minutes at end of operation; then removal of intratracheal catheter.

Five minutes later the patient was awake and responded to questions. Four hours after the operation the respirations were 24 to the minute, and upon auscultation through the dressings, breathing sounds could be heard all over the left chest.

Convalescence thereafter was smooth and uncomplicated; the patient never had any respiratory difficulty; his pulse and respirations were practically normal; he was sitting up in bed on the third day after the operation.

On the evening of the sixth day after the operation, his temperature suddenly rose to 102°, and he suddenly complained of severe pain in the left chest, his pulse became very rapid and feeble. In spite of active stimulation he soon went into a condition of collapse and died a few hours later.

The post-mortem examination showed that there had occurred an infection of the pleural cavity by direct extension from the ulcerated carcinoma of the oesophagus.

From the standpoint of the insufflation, the operation was highly successful, and all the manipulations within the chest were accomplished with perfect ease. The lungs were distended and collapsed at will, and all parts of the pleural cavity could be well exposed. At no time was the operator disturbed by violent movements of the lung; the slight respiratory movements which the patient made were not at all communicated to the lung, which remained practically immobile. The fatal outcome was probably due to an infection from the ulcerated tumor, although an operative infection may have occurred.

He closes with the following paragraph: "In all of the thoracic operations above reported, as well as in a large number of thoracotomies for empyema that we have done, the anaesthesia was a very good one. In not a single instance were any changes in the patient's condition observed when the pleural cavity was first opened; the pulse remained regular and of good quality and the patient's color remained good. In several of the cases, there were adhesions between the visceral and parietal pleura, but in most of the patients whose histories are given above, there were no adhesions, and the practically normal pleural cavity was invaded. We have not yet had occasion to operate upon a patient in whom pleural cavities have to be opened. Such a case would be the supreme test of intratracheal insufflation. There is, however, every justification for the belief—based upon the results of animal experiments in which both pleural cavities were widely opened, and upon the experiences we have had with insufflation as a method of artificial respiration in sev-

eral patients in whom all respiratory movements had been abolished—that it will be safe to open both pleural cavities if necessary, as far as the dangers from the double pneumothorax are concerned. The cases here reported are too few to allow one to draw final conclusions, but they do indicate that in the method of intratracheal insufflation we have at last a simple method for the avoidance of those dangers which have prevented the development of surgery of the intrathoracic viscera.

CALIFORNIA HOSPITAL ALUMNAE NOTES.

The annual meeting of the California Hospital Nurses' Alumnae Association was held at the Directory Rooms, on Wednesday, December 27, since the regular time for the meeting came on Christmas day. The new constitutions were ready for distribution, and we all felt quite proud of them. After the reading of the minutes of the last meeting, the reports of the Secretary and Treasurer for the past year were read and accepted. Both were very good and showed progress during 1911, but the Secretary's report was unusually good. Four new members were unanimously elected: Misses Ethel May Lent, Lydia Koonst, Frances E. Parks and Katherine Martin, all of the Class of 1911.

For a long time the nurses of the Alumnae Association have been trying to devise some plan for caring for any of their number who might be sick. For some time the California Hospital management, through Dr. Lindley, have been giving their graduate nurses the very low rate of ten dollars per week for care in the Hospital, and our California Hospital doctors have always cared for our nurses free of charge, so that in many respects we were well cared for already. But we felt we wanted a fund, or an endowed bed, so

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that any of our nurses who were ill and unable to pay anything could still feel that they were not a burden upon any one. At this meeting a modified form of the "Hospital Association" plan was adopted, whereby all our nurses who wish may pay fifty cents per month in addition to the regular yearly dues of the Association, and this fund, together with half the initiation fees and the regular yearly dues, will constitute a Sick Benefit and Relief Fund, which will be in charge of a special committee, and from this fund all hospital expenses of our sick nurses will be paid. If we find that fifty cents per month is not sufficient, we pledge ourselves to pay one dollar per month, instead of fifty cents. We feel quite sure all our nurses will enter into this arrangement, and we are very happy over it, as it

had seemed impossible to raise money enough to permanently endow a bed. By this method we have practically the same thing, and we are able to do it for ourselves.

The election of officers for 1912 resulted as follows: Miss Louise Kent was re-elected president; Miss Claire Hardison was elected first vice-president; Miss Carolyn Arnold, second vice-president; Mrs. Mary Carson, secretary, and Miss Verna Shaw, treasurer. Mrs. Emma Durbin was elected councillor for three years; Miss Ida Westover, for two years, and Miss Eva Johnson, for one year.

It was unanimously agreed that a special vote of thanks be given to Mrs. Middleton and Miss Alice Middleton for the dainty refreshments and the delightful social time with which they

close all the meetings of our Alumnae Association.

The secretary was instructed to send a note of remembrance and sympathy to Dr. Lasher and to Miss Isabel Gage, who are ill, and also to send a letter of sympathy to Miss Alma Sax, whose brother died so recently. We feel very deeply for Miss Sax in this time of sorrow and bereavement.

Miss Caroline Jantzen, '07, superintendent of the German Hospital, has returned to her post, after a month's much needed rest and recuperation.

Miss Vernie Shaw, '11, has gone to her home in Lindsay for a vacation before taking up her work here as private duty nurse.

Miss Nellie Kelley, '09, has gone to Washington, D. C., with a patient.



Hon. George Alexander Talking Sane Politics to the Nurses of the California Hospital During Their Luncheon Hour Two Days Before His Re-election, by an Overwhelming Majority, as Mayor of Los Angeles, December 2, 1911. (Courtesy Los Angeles Times.)

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Miss Margaret Waller, superintendent of Bard Hospital, who spent a week in San Francisco and Berkeley with friends just before the holidays, reports a most delightful trip and a real rest.

Miss Claire Hardison, '03, leaves this week for San Francisco and Sacramento, where she will take charge of a patient after a short rest and visit.

THE IMPORTANCE OF ELIMINATION.

Dr. D. M. Hall of Memphis (Tri-State Med. Meeting), believed that there were countless thousands of human beings who would be better citizens and better men morally, mentally and physically if they could throw off the benumbing clutch of

their chronic toxæmias. The question arose as to what could be done to prevent this condition and to relieve those suffering from it. The answer was, by aiding and stimulating elimination by clean, healthful living. We should teach people, especially the children at school, the value of hygiene, diet, exercise and fresh air. By these means one could prevent over-taxation of the organs of elimination, enable every organ of the body to perform its function properly, and greatly increase the resisting power of all the tissues of the body.

BUDDHIST DIET: Amongst Burmese there is no prejudice against eating the flesh of animals which have met a natural

death from old age, or which have died from disease. No evil seems to result from such food, which English prejudice condemns. I do not think that Burmese Buddhists can fairly be described as the "most Temperate men". They are fairly temperate, but a good number, more especially in the sea-ports, have taken to liquor drinking, which does not improve them. Neither are they the "meekest and mildest of men." They are naturally proud and excitable, and then, if a knife or dagger is handy, they will commit crimes which they regret. But though easily roused to anger, they are compassionate, generous, hospitable, courteous.

CENTIGRADE AND FAHRENHEIT.

A correspondent of The Lancet offers the following new alternative method of converting degrees Centigrade into degrees Fahrenheit, which may be found easier to perform men-

tally as the figures can be more easily retained in the memory—viz., multiply by 2, deduct one-tenth of the product, and add 32. Example (a), 30° C.= 86° F. Method: $30 \times 2 = 60$. $60 - 6 = 54$. $54 + 32 = 86$. Example (b), 37° C.= 98.6° F. Method: $37 \times 2 = 74$. $74 - 7.4 = 66.6$. $66.6 + 32 = 98.6$. Example (c), 40° C.= 104° F. Method: $40 \times 2 = 80$. $80 - 8 = 72$. $72 + 32 = 104$.—Medical Brief.

Tuberculosis is a comparatively recent disease among the Arabs and Syrians, but so rapidly has it spread that the natives are in great fear of it. Consequently when a member of a family is known to have the disease, he is frequently cast out and compelled to die of exposure and want. A small hospital for consumptives has been opened at Beyrout under the direction of Dr. Mary P. Eddy.

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TREATMENT OF FRACTURES.*

BY W. W. RICHARDSON, M.D., PROFESSOR OF SURGERY THE LOS ANGELES
MEDICAL DEPARTMENT OF THE UNIVERSITY OF CALIFORNIA.

The open treatment of closed fractures has of late been the subject of so much discussion, that any paper upon treatment is expected to be a plea for or against the wider use of that method. I believe the consensus of opinion in America is in favor of the limitation of the open method to those cases in which a satisfactory cosmetic and functional result cannot be obtained as surely and safely by any other method. Moreover, I believe we are agreed that the use of the open method should be reserved for surgeons competent to perform such special work. (This argument, therefore, may be confined to the individual case under treatment and need not enter into a discussion of the general principles of fracture treatment.) It has appeared to me, that in the discussions of late, too much stress has been laid upon an exact *restitution of the form* of the *bone* and too little upon the restoration of the *function* of the injured member. The almost universal practice today, of having before us, in every

case of fracture, a clear picture of the bone, is leading us to regard a fracture as an injury to the bone alone, in disregard of the injury to the soft parts, and to direct our efforts of treatment solely to a restoration of the form of the *bone*, in disregard of the restoration of *function*. It is the custom to illustrate the results of treatment by a demonstration of the radiograph, instead of the patient himself. That accurate reduction of the fragments of a fracture is desirable, there can be no question; but that this is the only object of treatment is absurd. That considerable deformity is compatible with perfect function is a matter of daily observation, as well as the converse that perfect apposition in no wise assures perfect restoration of function. The object of treatment should be to restore the form and function of the injured member in the shortest time possible, and with the least danger and inconvenience to the patient. Of the *greatest* importance, is the restoration of function, to which the

*Read before the Southern California Medical Society, San Diego, December 6 and 7, 1911.

restoration of form bears a close, but not always integral connection. The element of *time* will become of greater importance as our employer's liability laws become better defined. Today we stand in the peculiar light, of a nation accused of being wholly commercial, yet taking little cognizance of the enormous monetary loss, sustained by a disregard of the time element, in the treatment of fractures. The element of *danger to life* is of the greatest importance, for aside from humanitarian reasons, the loss of a life by the method of treatment, adds enormously to the economic consideration. Of least importance, yet a cogent factor in the choice of our method of treatment, is the element of *convenience to the patient*. If we are agreed that the open treatment of closed fractures should be reserved to the trained surgeon, and in *his* hands should be applied only to those cases which resist conservative treatment, then any addition to our *methods* should be welcome which will restore the function of the injured member in the shortest time possible and which may be entrusted to the general practitioner, without danger to the life of the patient. It has for so long been an axiom in fracture treatment that after reduction of the deformity, the fractured limb should be immobilized until definite union has taken place, that it seems like heresy to attack such doctrine. And yet it is in *such* attack that the greatest advance has been made, both as regards the ultimate function, and the time element of treatment.

The object of this paper is to bring before you for discussion the question of mobilization in contradistinction to immobilization in fracture treatment.

Although American surgeons have done so much for the advancement of fracture treatment, it has remained for continental surgeons to lead the way in the advocacy of the *greatest* advance in treatment, i. e., the substitution of mobilization for the time-honored immo-

bilization of fractures. In Germany, Bardenheuer, and in France, Championierre have been the champions of mobilization and as widely as these two men differ in their technic, yet in principle they are united in the overthrow of immobilization and the substitution in its place of measures which, while maintaining the position of the fragments, yet preserve the function of the injured limb, during the process of healing of its fractured bone. They have proven by incontrovertible reasoning based upon knowledge of the healing processes after fracture, that immobilization is not only unnecessary for callus formation and consolidation, but positively detrimental, and have demonstrated by the treatment of thousands of fractures *without* immobilization that their reasoning is correct. With surprising slowness knowledge of their work is being spread, but already the general treatment of fractures is being influenced by it, though few American surgeons have acknowledged thorough conversion. As the writings of neither of these men have appeared to any extent in English, and as the principles of their methods of treatment seem to be little known in America, a brier explanation may be worth your consideration. The principles and technic of Bardenheuer's methods are concisely and tersely set forth in his little book, "Die Technik der Extensions Verbands." His tenets are in short, that immediate and accurate restoration of the form of the fractured bone with the prevention of the recurrence of deformity is a necessity to proper restoration of function, but that this object may be attained without absolute immobilization, and in such manner that the function of the soft parts may be retained during the process of bone repair. The chief factor causing persistent displacement, he believes to be the retraction of the soft parts, not the *active* muscular contraction, which cannot long endure, but the elastic retraction

tion of all of the soft tissue favored by the traumatic irritation and the inflammatory exudate. The loss of function persisting often for a long time after perfect anatomical restitution of the bone, is due to the adhesion and degeneration of the muscles, tendons and ligaments, from the long inactivity, and to oedema and lymph stasis from the vascular changes, due to the same causes. Callus formation and consolidation are delayed by the impaired circulation from inactivity and splint pressure. Excessive callus formation he believes is due, not to any slight movement between the fragments, but to their wide separation. The indications for treatment deduced from this reasoning are met by his permanent extension treatment. No splints of any kind are used. Reduction in good position is maintained by means of adhesive plaster and weights, on the principle devised by Gordon Buck to whom Bardenheuer gives full credit. This principle Bardenheuer has extended beyond its original application to the prevention of shortening in fracture of the Femur, to the prevention of all deformity in any fracture of the long bones. By the addition to the longitudinal extension, of lateral, and anterior and posterior extension, displacement in any direction may be overcome. In theory the plan is perfect and in practice as carried out in Bardenheuer's clinic the result is close to perfection.

Description of the details of his method is useless, as the technic must be seen to be appreciated and only by adherence to detail can the method be made successful. Descriptions and diagrams appear so complicated as to be discouraging, but in practice I assure you the method is simplicity itself. In many fractures other methods are easier of accomplishment, and yield equally good results, but in some varieties, results are obtained by this method which I believe can be secured in no other way, as certainly and as safely. To this class

belong the fractures of the upper end of the humerus, especially in elderly patients. These cases are treated by Bardenheuer in extension upward and outward, with the arm in extreme abduction, or preferably directly upward, parallel to the long axis of the body. Lateral tractions are applied to correct later displacements if necessary. Active movement is begun as early as the eighth or tenth day and gradually increased in extent. The extension is continued for three weeks and then exercises with a staff are begun, the extension being replaced in the intervals. Properly executed the results by this method are astounding.

During the past two years, we have been using this method in our fracture clinic at the Los Angeles County Hospital, and in a number of patients beyond the 50th year of age, with loose fractures of the surgical neck of the humerus, we have been able to procure at the end of six weeks, firm bony union with a range of active movement equal to the normal. In a woman over 50 with a fracture of the surgical neck of the left humerus, with typical displacement, and a fracture of the olecranon upon the same side, *perfect* restoration of function was obtained within three months. In fractures of the femur the control of the fragments is exact and with the use of the X-ray to point out the direction of the necessary traction, the treatment by extension is a method delightful in its simplicity and exactness. In those oblique fractures of the tibia in its lower half, so difficult to control, Bardenheuer's extension offers a solution satisfying in its results. Wherever in fact, displacement exists which tends to recur after reduction, making retention by splints impossible, a knowledge of the permanent extension method, will often avoid the necessity of an open operation.

The only serious objections to the method are the necessary confinement to bed and the constant supervision re-

quired. It is better adapted to hospital than private practice, and yet I have used it frequently in the patient's home and with untrained attendants. That the method will be more universally used when its details are more widely known, I have no doubt.

The second method to which I have referred is that of massage and mobilization as systematized by Championnierre of Paris. His attention having been attracted many years ago to the rapid recovery of function in a Potts fracture treated as a sprain, by massage and movement, he has gradually evolved a system of treatment applicable to all fractures of the extremities, which is explained in his little book, *Precis du Traitement des Fractures par le Massage et la Mobilization*. Believing that the disability following fractures is rarely due to moderate displacements, but rather to the adhesion and degeneration of the soft parts and joints, his aim of treatment is to prevent these conditions by maintaining the function of the muscles and joints during the bone repair, in preference to complacently permitting them to occur and treating them afterward.

He rightly regards function as of paramount importance, and views moderate bony deformity of little consequence, if it does not interfere with the use of the limb. Massage and passive movement are commenced immediately after the injury and with the early addition of active movement, are continued daily, in cases with little tendency to displacement. Splints are used to maintain position but they are removed daily to permit the seance of massage and mobilization. Each seance consists of gentle massage, not of the fracture, but of the injured limb, followed by slight passive and then active movements, the excursions of motion increasing gradually as repair takes place, but never being so extensive as to cause pain. In cases with great tendency to reproduction of

the deformity, great *care* is exercised in the mobilization, or the splints are allowed to remain undisturbed, until some degree of union has taken place, before attempting movements, or the splints are loosened for the massage alone. He is enthusiastic concerning mobilization but *not insane*. The effect of early massage and mobilization is astounding. The patient presents himself with anxious face and muscles rigidly contracted. The slightest movement or the touch of the surgeon is followed by groans of pain and involuntary muscular contractions. After the gentle anesthetizing massage, the face loses its anxiety, the muscles relax and the patient is surprised that gentle passive movements are painless, and that he can even actively move the limb without pain. This effect is especially noticeable in fractures in the neighborhood of the joints. In Colle's and malleolar fractures, the results are really remarkable. Early bony union takes place, with complete restoration of function, or rather retention of function, for the power of movement is never lost. In our County Hospital clinic this method has been used only in cases with little tendency to the reproduction of deformity, and it has given great satisfaction, in reduction of the time of disability. Championnierre has taught us, not the uselessness of splints, but that we have abused them; that their function is not immobilization, but the prevention of displacement. We may be too timid to carry out his treatment in full, yet the leven of mobilization enters our souls and we resort to earlier movements.

From each of these methods may be selected gems of value. I believe no one who has intelligently used Bardenheuer's extension in shoulder fractures will again be satisfied with the results of other methods, and in wrist and ankle fractures, the method of Championnierre is incomparable.

No one should say that the reduction and retention of a fracture is impossible by any other means than by open operation, who has not properly used the method of permanent extension. In Bardenheuer's clinic the open method is reserved for—

1. Fractures of the head of the humerus in which the fractured surface of the fragment is turned toward the joint surface of the scapula.

2. In luxation of the fractured head of the humerus in the fossa subscapularis, when reposition has failed.

3. In interposition of fragments between the joint surfaces.

4. In luxation fractures of the carpal and tarsal bones.

5. In patella fractures with total laceration of the lateral expansion of the extensor tendons.

6. In some cases of fracture of the olecranon and of the Processus posterior calcanei.

In all other fractures he has been able to secure good results by extension, and he states that during the past twenty years, covering the treatment of many thousands of fractures, he has had not a single pseudarthrosis, save only in the neck of the femur.

In many fractures our accustomed splints and the plaster cast yield such excellent results that we will not give them up, but let us learn that early massage and mobilization, shorten the time of repair, and hasten the restoration of function. Quite in line with the modern treatment of fractures is the time-honored Hodgen's splint for fractures of the femur. It yields such excellent results and is so comfortable to the patient, nurse and surgeon, that those of us who have used it extensively are hard to wean.

Let us have at our command a practical knowledge of all of the recognized methods of treatment, and fit to the individual case that one which best fulfills the indications, controlling in every case the position of the fragments by the radiograph and striving to secure such apposition of the fragments that union will take place in position sufficiently accurate to assure good function. When this cannot be obtained from the nature of the fracture, then and then only, let us resort to the conversion of a closed into an open fracture, and to the retention of the fragments in position by an internal splint, if they cannot otherwise be retained.

SMALLPOX EPIDEMIC.*

BY E. D. WARD, M.D., ASSISTANT HEALTH OFFICER, CITY OF LOS ANGELES.

The first case of the recent epidemic of smallpox was that of an Indian boy at 323 East First street, reported on November 22.

The next case, reported by a policeman, was at 1303 Kearney street. Shortly after seeing this case, another one in a court (at 207 N. Utah) which we were holding under observation, was seen and both removed to the Smallpox Hospital at the same time. The Indian woman had been visiting in this section.

The neighborhood of Kearney and Utah streets is one of the most crowded and poorly protected parts of the city, consequently it was considered necessary to quarantine two entire blocks and vaccinate generally, excusing only those showing evidence of having had smallpox. All doubtful homes were fumigated.

Inquiry concerning the origin of these cases developed a rumor that some Mexicans who had recently arrived in the lo-

*Read before the Los Angeles County Medical Association, January 19, 1912.

cality from Mexico, had had variola, but all efforts to locate the whereabouts of these men were fruitless.

The district was carefully canvassed from time to time, but no new cases being found, and the three weeks having expired, it was finally decided to raise quarantine.

Since then cases have arisen from time to time, and, on January 16 we had 44 cases within the city proper. Six cases just outside the city were handled by Dr. Sawyer. There are also three cases reported in from Venice.

The cases are fairly distributed throughout the city—no one direction or locality being especially favored except the downtown hotel district and the Mexican quarters, as one would naturally expect.

Counting the Venice cases which might have originated from us and Dr. Sawyer's six cases, which are without doubt due to contact with our city cases, we have to date 53 cases, besides, we have direct evidence of five cases that were not reported, or observed by us.

Thirty-four of our 45 cases were whites, eight Mexicans, two Indians and one Negro; 22 were males and 22 females; 36 adults and 9 children. Fourteen were decidedly confluent; 28 were discrete, two mild variloid and one abortive. Six died—a mortality of 11½%, which, according to the records, is the highest percentage of mortality and the most extensive epidemic since 1899.

Eight cases were second cases in the same family, four of whom were successfully vaccinated in the incubation period—their arms in the state of active pustulation when the eruption appeared. Three of the four were decidedly modified cases; the eruption was quite thick, but the pustules matured and separated early and unattended with any serious symptoms whatever. The other (a pregnant woman) was confluent and quite sick for a few days, but she succeeded in carrying her baby successfully through

and has made a complete recovery. The abortive case is interesting, in that the patient had all of the symptoms of invasion, chill, fever, vomiting, intense headache and backache. On the third day of illness his temperature dropped and close inspection revealed numerous faint macules over his face and chest. Returning on the fourth day, expecting to find a well-marked eruption, we were surprised to find the macules all gone and no further symptoms ever occurred. He is the father of a little girl who had it in a confluent form. In fact, in several of the mild cases little pin point macules could be seen that had gone through the entire cycle under the skin and appeared in the stage of dessication as little dark hard pin point particles which could be dug out with a knife.

Of the deaths, two were above the age of 70 years and in both cases the eruption failed to mature properly. One was a negro who failed to break out well, some of the lesions matured in the ordinary way while many remained in the papular stage throughout, others could be felt as minute granules under the skin, not even forming a well developed papule.

The other developed up to the vesiculo pustular stage in the usual manner and then instead of becoming more tense and inflamed preparatory to rupture they began to get looser and the skin of the vesicle even wrinkled in places. Then some of the lesions, especially on the feet and legs, began to show in the areola instead of the ordinary inflammatory redness, a hemorrhagic redness. Later the pustules themselves filled with blood.

Both of these showed the effects of toxemia from the very beginning and dropped into a typhoidal condition, being dull and heavy and unresponsive. Later they passed into a coma in which they died.

Three of the others were young adults of 24, 20 and 17 years, respectively.

These cases did not have the fall in temperature described in the typical case.

The Mexican registered the lowest temperature, 103 deg., the day following the eruption and at this time he also became rational. But with the onset of the secondary rise, he developed an excited active delirium, tearing at himself so violently as to require restraint—he died fighting.

The older of the white men was delirious when we found him on about the first day of the eruption—there was no appreciable relief in his symptoms at any time. His temperature remained quite high and his delirium never left him, and was more of the muttering type. Soon, his face assumed a dull leaden color and shrunken appearance, whether from hemorrhage or cyanosis was impossible to determine on account of the thickness of the eruption. Blood was washed out of his bowels by enema and bloody urine obtained by the catheter. Many of the pustules also were purplish and filled with blood. He gradually sank lower and lower and died in a state of coma.

The seventeen-year-old boy was treated privately in his home and we did not follow the case.

The other was a baby of 2 years and 8 months, one of the first cases we received and well advanced when we found her. There was hardly a spot on her body that was not scratched and bleeding and she died after two days in the hospital.

All the deaths occurred between the ninth and twelfth day of the disease.

Now as to the diagnosis: Most physicians fight shy of variola to protect their business interests and besides that the disease is isolated at the earliest possible moment, consequently, many have carried on an extensive practice for years without ever having the chance to observe one case all through. Then, too, many atypical cases resemble other

diseases, especially when modified by vaccination. Likewise atypical cases of other eruptions often closely resemble smallpox.

In this last epidemic one confinement case was treated through the initial stage as a bilious attack by one of the members of one of our non-ethical concerns. When the eruption appeared he informed the patient and friends that it was due to the calomel he had taken and had the case transferred to the County Hospital, from which place the office was notified. This case probably exposed fifty people. Any eruption at all doubtful should be reported at once as a suspicious case as one day's delay in isolation means many exposures. We feel it the duty, and it is understood by all the subordinates in the Health Office to protect the interests of the reporting physician to the fullest extent and we believe that with a little tact this end can always be accomplished.

The diseases liable to cause confusion in the diagnosis may be divided into two groups:

1st. Those most likely to be confusing in the period of onset, i. e., before any eruption appears.

2nd. Those presenting confusing eruptions. Among those of the first group may be mentioned, Intususcception of the bowels, acute Cerebro-Spinal-Meningitis, Appendicitis, Poisoning, Typhoid and Influenza.

A good thing to remember in the onset is that the pulse rate in smallpox corresponds with the temperature while in intususcception and appendicitis, it frequently is not so.

Poisoning generally presents no temperature especially in the early stage when vomiting is most intense. The onset has simulated typhoid and even given a positive widal. But in the absence of an epidemic it is most frequently called influenza.

In the second group may be mentioned measles, scarlet fever, erysipelas, chicken

pox, typhus fever, glanders, impetigo, erythema multiforme, pustular syphilides and drug rashes.

The suggestion of some of these diseases may seem a little absurd at first thought, but it is to be remembered that one may be first called at any stage from the first day of the onset to the time when the scabs have desquamated. Then, too, the smallpox modified by vaccination, or mixed with disease, is often rather atypical, and many of the favorite landmarks may be wanting.

For example: Umbilication may be absent. It may not break out on the palms and soles. The shotty induration especially may not occur. The lesions are not always uniform. The vesicle is not always tough and firm, and may sometimes be rubbed off quite easily, leaving a base which is not always elevated.

The vesicles sometimes collapse entirely when punctured. Then, too, the disease may abort in any stage of the eruption, from macule to pustule and may run its entire course in less than a week. The fever (especially in confluent cases) may not drop with the appearance of the eruption. Other diseases too often simulate smallpox sufficiently closely and present its so-called landmarks to such an extent that one is very much inclined (especially in the presence of an epidemic) to diagnose smallpox when it does not exist, e. g., varicella, syphilis, erythema multiform may present a suggestive eruption on the palms and soles.

Varicella frequently presents umbilicated vesicles. Besides, the history may be so direct as to materially warp otherwise good judgment, e. g.—In this last epidemic we had a case of a little girl who was directly exposed to a confluent case well advanced toward pustulation; her vaccination was in a state of pustulation sufficiently advanced to suggest a decided modification of the disease in case she had taken. On exactly the

tenth day she broke out with the chickenpox.

The measly and scarlatina rashes in smallpox are usually prodromal and go away before the true eruption occurs, but measles and the true eruption are very similar to smallpox at exactly the proper stage, especially in selected cases.

One of our cases had a rash resembling measles which appeared with the true eruption. The first appearance was of a few scattered papules and the measly rash between. Later, some of the measly eruption developed into the true smallpox papule while the rest of it faded.

Another case had a peculiar rash which appeared about the third week. On the trunk it resembled measles, on the thighs it resembled scarlet fever and about the ankles it was almost as intense as an erysipelas. It faded in a few days.

Points to be remembered are that the temperature remains in measles while in smallpox it generally drops when the eruption appears. The catarrhal symptoms are absent or at least very mild in smallpox as are the typical Koplik's Spots.

The eruption of varicella is not uniform, the vesicles come early and in small crops so you may find papules, vesicles and small excoriated papules where the vesicle has ruptured all in close proximity to one another. Usually the only variation found in smallpox is that it is slightly older on the face than on the trunk and legs. Erysipelas is more brawny and indurated circumscribed, marginal, may develop vesicles but not papules. In typhus fever the papules rarely appear on the face. The temperature does not decline with the appearance of the eruption, nor is there any relief in the symptoms. The eruption of glanders appears on the first or second day, is accompanied by an ozena and subcutaneous nodules. There is no decline in temperature and the pustules

mature earlier. Impetigo is more superficial, generally confined to the face and hands, starts primarily as a vesicle or bulla and dries in ocre colored scales and does not leave permanent scars.

Pustular syphilis appears in successive crops, the base of the pustule is larger and more indurated. Pustules are not umbilicated and tend to ulceration, pustules mature more slowly and the lymphatic enlargement and other symptoms of syphilis are to be found. Drug rashes generally have no definite constitutional symptoms and there may be a history of taking the drug.

In conclusion, it might not be out of place to note a little of the prevailing attitude towards vaccination: From September 1st to December 1st, 1911, 1104 people—90 adults and 1014 children were vaccinated at the Health Office. Most of the adults were either firemen or policemen, or railroad employees, of whom vaccination was required in order to hold their positions. Quite a number of the rest were vaccinated under threat of quarantine, having been exposed to smallpox; the remainder were voluntary and for the purpose of entering school. On the other hand, we received 3737 cards signed by parents having conscientious scruples against vaccination, and not all the schools heard from then. It may be noted that to sign a protest card a child has only to get the card from the principal of the school and bring it home for signature, while every vaccination requires a trip to the Health Office or the family physician. To show how deeply this affects the younger children, just entering for the first time, I might state that on inspection of a kindergarten of 40 children, who had been exposed, all but twelve were sent home for lack of proper vaccination—none of these children have returned to school with cards from their family physician, nor have they presented themselves at the Health Office for vaccination.

DISCUSSION.

Dr. Stanley Black: I have not seen anything of the present epidemic of smallpox and, fortunately, in Pasadena we have not had any cases for two years. But I have heard from Dr. Powers of the recent epidemic here in Los Angeles, and from the number of deaths that have occurred it is certainly the most serious we have had in years. It behooves all of us who see patients with so-called chicken-pox to watch those cases closely, and preferably with a physician from the health office. Probably there are very few physicians present who have seen half a dozen cases in their practice, so that the majority of physicians are unable to diagnose difficult cases. I have seen such cases; one, for example, was undoubtedly smallpox, but I could not make a positive diagnosis until Dr. Powers saw it. Again, I saw a case of multiple erythema and was inclined to think it was smallpox until Dr. Powers saw it. So it behooves all of us to have Dr. Powers see any suspicious cases.

Dr. Powers: There is so much to be said about smallpox one way and another that I hardly know what to say. Perhaps you would be interested in knowing how this epidemic began. Probably before the political campaign, someone came from Mexico to one of the camps across the Los Angeles river. At any rate, when we got in there we found three well-marked cases and a history of others having had it there. These patients from Old Mexico have an entirely different form of the disease. Two of the children who died there, died under rather peculiar conditions. The physician said he did not see the children but once, yet on the death certificate he said he had treated one of the children from the 25th of November until in December. We heard a rumor that the child had an eruption. I am sure that two other patients supposed to have died of smallpox did not have

smallpox at all. But the fact is that smallpox was introduced into that section and in a type that generally appears as a confluent form. One child was only two and a half years old, and the mother, who did not know how to care for it, did not tie up its hands and it scratched itself until the whole surface of the body was raw. It lasted two days and died. Another case was of a mild form. The day before this we got an Indian baby supposed to have lived in a house in the 300 block on First street, but the Indian woman said she had been down in the neighborhood of Kearney and Utah streets hunting a home. She had never been vaccinated. I vaccinated her at once and the vaccination took, and it was a fine example of the coincidence of smallpox and vaccinia. She had a case of confluent smallpox and recovered. Without the vaccination I don't believe we could have saved the woman at all. Of the others who died but one had been vaccinated. We had two with confluent smallpox who said they had been vaccinated by a physician and they had certificates of successful vaccination. Each of them had a smooth scar without a single pit in the scar. It was evidently an infection but not vaccinia. One of these died. They kept him at home but I doubt if the boy would have recovered under anybody's care, particularly because I have not much faith in the remedies we use. The form that we get from Mexico is very different from the form that exists in the city at the present time. We took from one of the hotels a whole family from Idaho. The disease was of a type that might easily have been mistaken for syphiloid, or something of that kind. We have had other cases scattered around over the town, one case at Hope and Sixth streets, one at Eighth and Central avenue, one at Second and Main, and one on North Broadway. The man on North

Broadway was only 24 years old, but he had broken himself down during the campaign. He was delirious and died. One thing I have often been struck with that doctors look for and don't find, and when they ought not to they do find it, and that is umbilication. We had this in the hospital in the last few days, and also the modified type which would lead to the belief that it is measles. The umbilication occurs just as vesiculation occurs. You may see umbilication in a case of chickenpox that is advanced, but that is not the umbilication that authors speak of. It commences when vesiculation occurs and as soon as it is completely vesiculated and pustulation takes place, you no longer have any umbilication in smallpox. That is a point that should be borne in mind. An eruption first appears on the body, sometimes called a macular eruption, a "measley" eruption or a scarlatina eruption. Sometimes that occurs before the papules. We had seven deaths here during one epidemic on or before the fifth day of the fever. The rash appeared first. I noticed that in these the population occurs about the second day and it modifies the smallpox eruption so much that it might be mistaken for some other rash, as erythema or measles. In one epidemic about 16 per cent. of the cases had this eruption. The present epidemic has shown a large percentage. I believe this is due to the circulation. It is more marked in topers.

Dr. Geo. Malsbary: I would ask Dr. Powers if he has seen any deaths from smallpox in which there had been a vaccination, and had any of these cases just reported been vaccinated?

Dr. Powers: I do not remember ever seeing a death from smallpox in which the patient had been successfully vaccinated at any time in his life. Two

of the people who died during this epidemic had a scar, but it was a smooth scar, and where a smooth scar exists it is some other infection that vaccinia. Two others who had the disease had been vaccinated when they were children in Sweden; they were old people, one being 68 years old, but both had an abortive form of the disease. There were no deaths among those successfully vaccinated.

Dr. George H. Kress: In view of the abrogation of the compulsory vaccination law, what does Dr. Powers think is ahead of California in the matter of smallpox in the future?

Dr. Powers: At the rate we are accumulating unvaccinated children, it will not be more than three or four years until there will be the possibility of a serious epidemic. In one school 34 children were excluded, and but ten of them availed themselves of the opportunity to be vaccinated and return to school. As it was just before the holidays that may have had something to do with it. They are depending upon somebody's notifying them, and they rely too much on quarantine and fumigation. They are indignant if a case exists anywhere and the whole town does not know it, yet they are opposed to being vaccinated. One patient announced to us that she was a Christian Scientist, but we took her to the hospital. She had absent treatment given her. She had a pretty severe form of it, but she recovered. I think she changed her mind before she was through with it, for she told us it was not herself but her husband who was the Christian Scientist.

The treatment of smallpox is merely supportive. The best thing I know of is repeated bichloride baths, 1-10,000, and we put a mask of bichloride on the face, not to prevent pitting but merely to give relief, and we give strong coffee and keep the bowels open; in other

words, good nursing and good attention, seeing that they have the proper food.

Dr. George Cole: I have been very much interested in the paper and discussion. It carries me back to a time when we had an epidemic here twenty-five years ago. I had something like one hundred cases, yet this was a little city of 30,000 people. Compulsory vaccination was not then enforced. Now here we are with a city of some 300,000, all this smallpox has been existing something like ten weeks and the cases are limited to this small number. Perhaps it is a good thing this epidemic has come now instead of three or four years later, when we might have had an epidemic commensurate with the size of the city, such as we had at that time. I was interested in what the doctor said about the difficulty experienced by the general practitioner in making a diagnosis. At that time I was interested in the attitude assumed by some of the physicians. Often the doctor is thrown into consternation over what he thinks is smallpox, when it is only a case of measles. It occurs to me from what I saw at that time that you may do all you find recommended in books to prevent the pitting of smallpox, and you will find that some patients will pit and have badly pock-marked faces and others, with practically no treatment, so far as the pitting is concerned, may have a confluent form and yet there will be hardly a scar left on the face. I think it is not a matter of treatment, but that it is due to some peculiar characteristic of the skin, that one will pit so markedly and another will recover with scarcely a scar. I want to express my appreciation of the fact that we have someone in the health office in whom we all have faith.

Dr. Z. Levin: In an experience of 250 cases I saw one man have small-

pox twice. He had had one case and was well pitted, and later had it again. Whenever there is a shot-like feeling in the eruption in the palms and on the soles, you can put it down as smallpox.

The President: I am sure most of us feel that Dr. Cole expressed our sentiment when he said that if we are to have an epidemic, it is fortunate that

we have it before there are gathered together here so many who are not vaccinated. I think it would be well if Dr. Lindley would publish these remarks in the SOUTHERN CALIFORNIA PRACTITIONER, for it is not possible for all of our members to be present every evening, and many of them would be interested in this report.

STRONGYLOIDES INTESTINALIS—AMÆBIC DYSENTERY. REPORT OF CASES.

BY R. D. KENNEDY, GLOBE, ARIZONA.

S. A., aged 45; born Northern Italy; had no diseases of childhood; had pneumonia seventeen years ago and again seven years ago; made good recovery.

Worked on a farm in Northern Italy till he was 23 years of age. Came to Northern Michigan 22 years ago, where he worked in the iron mines for thirteen months. In 1891 went to Colorado, where he worked in the mines for eight years. He then moved to Morenci, Arizona, where he worked in the mines for four years. At the end of this time he had to quit work on account of weakness, shortness of breath, and morning diarrhoea. He then moved to Kansas, where he stayed two and a half years. He gradually gained in strength and came to Globe six years ago, and went to work in the mines. One year ago began to feel weak and short of breath, and three months ago the morning diarrhoea recurred.

Physical examination: Patient thin, sallow. Hg. 75%, R. B. C. 3,480,000, White B. C. 8,000, very nervous and irritable. Emphysema of lungs, tongue furred, appetite poor. Urine examination negative. Stool showed considerable blood and many Strongyloides Intestinalis.

Patient put on thymol in thirty-grain doses, following out the manner of its administration in uncinaria, and the

stools examined. There being no change, the dose of thymol was gradually increased till the patient finally received sixty grains at a dose without any apparent reduction in the number of parasites in the stool, or symptoms of intoxication. I then gave patient three ounces of glycerine by mouth and three ounces in an enema with no apparent change. I then put patient on large doses of santonin and immediately the morning diarrhoea stopped and the parasites disappeared from the stool. The patient has gradually gained in strength and the anemia gradually lessened. Sufficient time has not elapsed as yet to be sure that the relief is permanent.

REPORT OF CASE OF AMÆBIC DYSENTERY.

R. G., Italian, age 27; occupation, teamster. Family history, negative. Personal history: Was healthy as a child and had none of the diseases of childhood. Always drank coffee in moderate amounts; little tea, whiskey and wine, but large amounts of beer. Came to this country seven years ago from Italy, and has been in Arizona continuously since. Present trouble began July 5, 1910. He did not feel well that day but drank considerable beer; for three days following this he

had what he described as a bad cold and a sore throat, after which he had severe pains in the abdomen, not localized, accompanied by frequent stools in which there was blood of rather bright red color. How long this attack lasted he does not know. Following this, there were periods of alternating constipation and diarrhoea. The last attack began January 15, 1911, with severe pains in the epigastrium and just below the umbilicus, and during the attack he frequently felt nauseated and vomited. The pain was little influenced by what he ate, but if anything he was more comfortable when he omitted solid food. He lost twenty pounds in weight.

Physical findings Febraury 4, 1911:

Height, 5 ft. 6 in. Weight, 130 pounds. Teeth, good. Chest and heart, negative. Abdomen slightly distended and symmetrical. Liver dullness extends from the fifth rib to the lower border of the ninth in the marmary line; and about one inch below the costal margin in the para-sternal line. Abdomen quite rigid and quite tender over the epigastrium and below the um-

bilicus in the median line. Urine analysis negative, except for large amount of indican. Blood: Hg. 80%, R. B. C. 4,100,000, W. B. C. 24,375.

Gastric contents negative. Stools, small, averaging one-half to two oz. Number, two to six in 24 hours. Odor, foul and contain small amounts of dark red blood and mucous.

Microscopical examination showed blood, mucous, few pus cells, large numbers of bacteria, but no amœba could be found on repeated examinations. Proctoscopic examination showed an ulcer about four inches from the anus measuring one-half by three-fourths of an inch, of a grayish appearance, with a dark red, slightly elevated, irregular border. Material taken from this and examined showed blood and mucous and active amœba.

The patient put to bed on a liquid diet and given large doses of bismuth sub nitrate, with daily irrigations of the colon with a 1-3000 quinine solution. He responded to treatment but refused to stay in bed long enough to be entirely relieved and was soon lost track of.

INTUSUSCEPTION—A CLINICAL NOTE.

BY JOHN C. KING, M.D., BANNING, CAL.

I report this case because of the tendency of some of my friends to delay operation and await developments. The condition is not unusual and, in my limited experience, the symptoms point very clearly to the pathology.

A somewhat poorly nourished Mexican baby, eleven weeks old, had been well and cheerful until 3 p.m., when it suddenly manifested abdominal pain and vomited. Castor oil was given. I saw the child about 6 o'clock. Temperature normal. Occasional vomiting. No result from the oil but two or three stools of

pure blood. No hernia. No definite sausage but evident thickening could be palpated in the left iliac fossa. Rectum empty. Paroxysms of pain, but bright and cheerful between them. Immediate operation was advised, but the child appeared so well that consent was obtained with difficulty. As one of my consultants remarked (at 10 p.m.) "I wish the baby was sicker." Operation at 11 o'clock that night. The intususception began at the caecum which, with its appendix, had been carried through the colon and sigmoid to the upper end of the rectum. Reduction was accomplished by expres-

sion from the distal end. It was only when invagination was completely reduced that the operator appreciated its extent. The appendix was almost black from strangulation and was removed. No man can judge the length of an intussusception, nor whether adhesions have

formed, nor whether the gut is viable, except by opening the belly. Injection of water, insufflation of air or any other non-operative measure, simply adds to the danger, if adhesions or strangulation are present.

Banning, January 18, 1912.

EUROPEAN OBSERVATIONS.*

BY GEO. L. COLE, M.D., LOS ANGELES.

Before speaking of some of the things I saw abroad this summer, I should like to say a word about a morning I had in Syracuse, N. Y., in the Hospital of the Good Shepherd.

Dr. Belknap, professor of surgery in the University of Syracuse, was very enthusiastic about the treatment of eclampsia. He had recently had several cases of eclampsia and because of his successful management of these cases, he was inclined to think that our former management of eclampsia as laid down by many of our best authors was erroneous.

Some recent investigators have found that chloroform anesthesia, which we have been inclined to employ in eclampsia, is a mistake, as chloroform tends to bring about changes in the economy which, to some degree, accentuate the actions of the toxins producing the convulsions.

He is satisfied that ether is the proper anesthetic to administer and that the one basic element in the management of such cases is thorough elimination through the intestinal tract, without attempting to deliver the child at once, as is so often done.

Soon after my return to Los Angeles, I had an opportunity to put into effect the treatment here outlined, and with a most happy result. The patient at seven months became suddenly blind at 8 a.m., and after removal to a hospital developed convulsions at 3 p.m. When I saw her at 4:30, she had been totally blind since

8 a.m., wholly unconscious for several hours, had had several convulsions, the pulse was uncountable and her condition seemed imminently critical. We immediately withdrew from the arm thirty ounces of blood, gave two quarts of normal hot salt solution by hypodermoclysis, we put two ounces of Epsom salts into the stomach through a catheter introduced through the nose, kept her well covered with blankets and well surrounded with hot water bags, and otherwise let her alone. On the following morning there was a decided improvement, partial consciousness had returned, but no attempt was made to interfere with the fetus. She could now swallow and more salts were administered per mouth. Late in the day she began to get copious stools, and the following morning there was a still more decided improvement.

At the end of seventy-two hours labor began, and in about six hours she delivered herself without untoward effects and without more convulsions.

In short, she went on to a rapid recovery and left the hospital at the end of three weeks with urine free from albumen. I feel reasonably certain had this case been delivered on the evening after her arrival at the hospital, death must have ensued. The case was seen in consultation with Dr. Arthur Godin.

Sailing from New York and landing in Hamburg, I went directly to Naumheim. At this place I spent a month and

*Delivered at Los Angeles County Medical Association Meeting, December 15, 1911.

much could be said about the Nauheim treatment, but of that I have written in a letter to the *Practitioner.

While at Nauheim I found abundant opportunity to see some things surgical. The old university town of Giesen lies thirty minutes north of Nauheim, and Frankfurt-on-the-Main forty minutes south; both places connected by trains that run frequently.

It was my pleasure during the month to take an early morning train for either one or the other of these two places, spend the morning in the hospital and return to Nauheim in the afternoon.

At Giesen, Prof. Poppert always had an abundant morning's work in surgery. I saw him do several thyroidectomies. In several instances the goitre was not large, but well flattened out and very broad. In these cases it was his custom upon getting into the capsule to clamp the isthmus with two clamps parallel to the trachea, cut the isthmus between the clamps, turn the lateral sections outward and, when near the base of these sections, ligate with sutures carried deeply into the thyroid and so continue around the stump, leaving a small section on either side. It was a simple, quick procedure and it rather impressed me in that I had not seen it done heretofore. I have also had occasion to try this method out since returning, and have found that it is convenient, and tends to lessen the time ordinarily consumed in these cases.

The appendectomies were done with large incisions, as is customary in Germany, but not so long as many we have seen in that country.

His gall bladder work was interesting, but it seemed to me in many cases where we would have drained the gall bladder, Poppert resected.

At Frankfurt, Prof. Rhene, who was this year chairman of the Section of Surgery, in the German National Associa-

tion, was most courteous and had an abundance of work in the Statische-Krankenhouse. He, like Prof. Poppert, usually operated without gloves, without a cap and without respirators.

Upon one occasion he opened an abdomen for what he supposed to be a tumor of the pancreas, but it was found to be a neoplasm of the transverse colon. The ease with which he resected the portion of the transverse colon which contained the neoplasm and made an end-to-end union of the colon, using only one row of sutures, quickly whipping around the line of union a portion of the omentum and attaching the same, was rather remarkable. This was the first time I had ever seen an end-to-end anastomosis made with one row of sutures only.

Upon another occasion, a case that was noted upon the list of operations as an appendectomy was opened with an incision at least twelve inches long, extending from near the symphysis to the costal cartilages. He grasped the ascending colon and laid it over upon the abdomen, and with it seemingly nearly all of the intestinal tract. The hepatic flexure of the colon was so greatly displaced that it also turned out readily upon the abdomen. The appendix was a broad, long affair, extending some four inches up the posterior surface of the colon and well flattened out and apparently lying beneath the peritoneal covering of the colon. He removed the appendix and anchored the hepatic flexure securely in place. It was the longest incision I had ever seen made for an appendectomy, and the greatest display of intestines in a living subject. The whole procedure was done so expeditiously, and in such a masterly way that when he was done I could not but have great admiration for the skill and dexterity displayed. Without the long incision he could not have seen so plainly the condition that existed, nor could he have anchored the hepatic flexure as beautifully as he did.

*See Southern California Practitioner, page 411, August, 1911.

In exposing the intestines, it was the custom in this clinic to keep them well moistened while upon the outer surface of the abdomen with water flowing from a tube attached to a reservoir in the ceiling of the operating room.

After leaving Frankfurt and Giesen, the next clinic I saw was that of Prof. Kocher, of Berne.

At this clinic I was received by a nurse who spoke English well and very willingly gave all necessary information about gaining entrance to the work of Prof. Kocher. Both Kocher and the son, Alfred, speak English fluently.

The operating room is a large one with two or three tables occupied at the same time, the younger Kocher usually beginning and completing his own work, while the elder Kocher leaves the completion of his operations often to his first assistant.

The first morning I saw several hernias, a breast operation, and a number of thyroidectomies. At one time in the same room, the elder Kocher, his son and the first assistant were each doing a goitre operation.

The thing that most impressed me about Kocher was his sincerity, thoroughness and carefulness, combined with the absence of egoism and a gentleness that is so often seen in great characters. His goitre work here is almost without exception done under local anesthesia, and I must confess that it is the only clinic in which I have ever witnessed a thyroidectomy done under local anesthesia apparently without pain.

They had operated in this clinic, up to the time that I was present, about 4,750 goitres, exclusive of ligations, and seem to have attained the ability to produce local anesthesia satisfactorily. I should judge that they consume at least eight or ten minutes in the injection of cocaine about the goitre, and then leave the patient for a period of eight minutes before beginning the operation. It seemed to me that there was less carelessness

about strict asepsis in this clinic than in many of our American surgeries, and yet there was no such gross carelessness as one sometimes sees in some of the clinics of London.

Upon one occasion, while the senior Kocher was operating upon a case of Basedow's disease, the younger Kocher made an incision through the periosteum on the anterior portion of the tibia of a creatin, gouged out with a rongeur a cavity in the tibia, into which was implanted a portion of the exophthalmic goitre about the size of a walnut.

Later on, I asked Kocher if he had followed these cases of implantation long enough to be sure that he was producing a permanent benefit upon the creatins. In his cordial way he said, "Ah! that is asking too much for me to say at present, but I can say to you frankly that we have had some beautiful cases in which we have seen great benefit, and I am encouraged to go on with the work."

On another morning I had the pleasure of seeing him resect a superior maxilla for sarcoma, a ligation of the external carotid and a tracheotomy had been performed previously as a preliminary. The ease and dexterity with which this operation was done was sufficient to call forth the admiration of a number of American surgeons who were present; one remarking that this case alone was enough to repay him for his journey from Cincinnati.

While lunching with the Kochers at their residence, the elder Kocher made inquiry about a number of Los Angeles surgeons who had visited in Bern, showing that he held in remembrance his American guests.

The next clinics visited were those of London. At St. Thomas' Hospital one of the operators impressed me very much, as he did some ten years previously, with his extreme carelessness in technique and asepsis. Upon one occasion while operating for a hernia, following an appendectomy, he cut directly through into the

colon, stuffed some gauze into the incision in the colon and continued his dissection. A few seconds later he made a second incision accidentally into the colon some three inches from the first. Into this he stuffed another piece of gauze, and after having freed the adhesions about the hernial opening proceeded to close up the openings into the colon. It was done in a most slovenly manner that seemed to me worthy of the deepest criticism.

I saw him do a cholecystectomy expeditiously and with good technique, except that he seemed to have a habit of wiping his nose upon the back of his glove while operating, which would always cause a smile of derision from those assisting him. It is not surprising that many of his contemporaries say the name of this surgeon is synonymous with "sudden death."

At St. Bartholomew's I was present on consultation day. Mr. Bailey, Mr. Parr and Mr. Hawlings were in consultation. The consultation day occurs weekly. Some ten years ago, when I first attended these consultations, I was greatly impressed and hoped this custom of St. Bartholomew's might be more commonly introduced into hospital practice. The various members of the staff bring in interesting cases and present them, going through a formal consultation. It is not only instructive to students and medical men in the way of example of professional etiquette during consultation, but inasmuch as the consultation is held before an audience, every consultant is stimulated to give his best thought and suggestions, and I cannot see how it could result in other than great good to the patients thus brought into the consultation.

Bruce Clarke was to have participated in the consultation, but was called away on an emergency and excused himself.

At Guy's Hospital, I saw Arbuthnot Lane do his hobby, the so-called "ileocolostomy." His technique was beauti-

ful, he was one of the most careful men I saw in London with regard to his asepsis, and, as I am told is usually the case, was particularly obliging to all medical men present by giving them every opportunity to see his work and answer any questions that might be asked. The case upon which he operated was reported by him as a case of chronic indigestion and constipation which had been operated upon some six months previously for a chronic appendicitis. He said the patient had found no relief, and now he "would do the ileocolostomy and the patient would be well."

It was quite significant to me that no examination of the upper right quadrant was made after opening the abdomen and it seemed that he was suggesting a great deal in promising a certain cure from all digestive disturbances by this surgical procedure of his own invention.

At Charing Cross Hospital, I saw Mr. Waterhouse do some very good work. It is of interest to note that here the visiting men are allowed to sit above the operator and look down through glass upon the operation, certainly a good means of protecting the patient from any contamination from the visitors.

Perhaps the most interesting operator that I saw in London was Bland-Sutton, at the Middlesex Hospital. The ease and rapidity of operation without any apparent attempt at haste, his reputed knowledge of gross pathology, and his apparent unostentatiousness, mark him as one of the great operators of the world.

The Auditorium.

The Pomona Valley Medical Society held its January meeting at the home of Dr. N. J. Rice in Pomona, January 23rd. A paper was read by Dr. S. F. Davis on "Faulty Metabolism as a Causative Factor in Some Intestinal Diseases." Discussion opened by Dr. J. K. Swindt. A paper entitled, "Adiposis Dolorosa," was read by Dr. A. R. Brown.

HISTORY OF MEDICINE IN THE SIXTEENTH CENTURY.*

BY ELBERT WING, M.D., LOS ANGELES.

The conditions under which this essay is compiled are such that much of it is mere servile copying, and consequently the kind indulgence of the audience is asked. Again, in place of citations at their appropriate places, the general statement that the sources are the usual encyclopedias and historical articles, must answer. About the only original thing in any way connected with it is the assurance of your president in assigning the duty as he did.

It is a great honor to Galen that he did his work in a manner so masterful that his name is permanently associated with the science and art of medicine. He did more than that, his theories of the nature and treatment of disease were so remarkably complete that they seem to have flattered the intellectual indolence of medical men, and paralyzed their initiative, for more than thirteen hundred years.

The termination of this period of intellectual lethargy is marked by the sixteenth century. That century is remarkable in medical annals for its contributions to anatomy, surgery and internal medicine. Italy and the Italians were by far the most active in anatomical study in the period under discussion. This came about through the fact that at that time Italy granted permission for dissection of the human body, a permission not before obtained anywhere after its loss at Alexandria. The work was chiefly confined to the universities of Bologna, Padua and Pisa, with Padua the most influential. In the early part of this period the work bore no relation to physiology, and was concerned principally with a study of the structure, arrangement and position in the body, of the various organs. There were many able workers whose names cannot be mentioned in this paper. Among those

who worked in Italy were Jacobus Berengarius, Vesalius, Columbus, Fallopius, Eustachius, Fabricius and Cesalpinus. Neither Etienne, a Frenchman, nor Servetus, a Spaniard, were in any way identified with the work in Italy.

Berengarius, who taught at Bologna, was a worthy successor of Mendino, a prodigious worker and an enthusiastic teacher. He claimed to have dissected more than one hundred human bodies. He was the author of a compendium and several treatises, and gave minute and accurate anatomical descriptions. He was the first to take up the systematic study of the texture of the tissues, nerve, tendon, ligament, etc., which he illustrated with spirited drawings. Among his descriptions were the following: the opening of the biliary duct into the duodenum; the structure of the stomach; the rugae of the mucous membrane of the stomach; the organs of generation of both sexes; a long account of the anatomy of the fetus; the relatively large size of the chest in man and of the pelvis in woman; the arytenoid cartilages and the thymus gland. He described the oblique position of the heart in the chest, its cavities, the pericardium, the uniform presence of pericardial fluid, and he demonstrated the imperviousness of the ventricular septum. He, however, was confused by the pulmonary circulation. He described the ventricles of the brain, corpus striatum, infundibulum, choroid plexus, pineal gland and the pituitary body, the division of the carotid artery, the tunics and humors of the eye, and the incus and malleus. He described the vermiform appendix of the caecum, but lacking prophetic insight, failed to call attention to the immense part it was destined to play in the surgical and financial interest of future generations.

*Read at the Los Angeles County Medical Meeting, December 15, 1911.

The most illustrious of the Italian school was Andreas Vesalius (1514-1564). He was born in Brussels and studied at first under Du Bois, at Paris, but because conditions for the study of anatomy were so much better, soon went to Italy. Before his twenty-second year he became so famous at Venice that he was asked to demonstrate anatomy at Padua, and he later held the chair of anatomy at Bologna and at Pisa. He was called to Spain as court physician by Charles V., and enjoyed great favor and distinction under his protection and that of Charles' son, Philip, until a peculiar and almost apocryphal accident made it necessary for him to make a pilgrimage to Jerusalem to escape the rigors of the Spanish Inquisition. During that pilgrimage he was again offered the chair of anatomy at Padua, but his death prevented him from again taking the chair. His biographers lay great stress upon the character, genius and industry of Vesalius. He made many contributions to the science of anatomy, based upon his own independent work. Many of them were new, many corrected errors of Galen. He confirmed Etienne's discovery of the valves of the hepatic veins, and gave the best description of the brain up to this time.

Bartolomeo Eustachius was the best anatomist of the century, and is said to have divided with Vesalius the honor of having created a real science of anatomy. Among many distinctions he extended the knowledge of the internal ear, described the anatomy of the teeth and of the first and second dentition. His greatest distinction was earned through his *Anatomical Engravings*. These were completed in 1552, nine years after his book on anatomy. These plates show that he had dissected with the utmost diligence and care, and had taken the utmost pains to give just views of the exact shape, size and relative position of the organs of the human body. They were first published by Lanchisi in 1714,

then by Petralii and also by Albinus in 1774, and finally at Bonn, in 1790. It has been asserted that if he had been able to publish them himself, that publication would have advanced the science of anatomy in the sixteenth century as far as it succeeded in getting in the eighteenth.

The first seven plates illustrate the history of the kidneys and some facts relating to the middle ear. The eighth gave the heart, the vena azygos and the valves of the vena cava, named in honor of Eustachius. The eight successive plates—9 to 16 inclusive—show the viscera of the chest and abdomen. The seventeenth illustrates the brain and spinal cord. The eighteenth gives views of the origin and distribution of the nerves. Fourteen of the plates were devoted to the muscles. In dissecting he used when necessary glasses, maceration, dessication and injection.

If intellectual and manly qualities may be inferred from the nature and quality of his work, the Spaniard, Miguel Servet, or Servetus (1511-1553), was the most distinguished among the anatomists of the sixteenth century. Unfortunately he paid the penalty of his genius and temerity with his life. He apparently had not read, or did not heed, the statement of Christ: "I have other things to say to you, but ye cannot bear them now." He began his student life at the University of Toulouse, when nineteen years old, but soon went to Basel, which city seemed to have some quality in its atmosphere—Swiss independence, perhaps—which nourished radicals, since it also was the theater of the spectacular career of Paracelsus. While at Basel, in his twentieth year, Servetus published his celebrated work, *Trinitatis Erroribus*, in which he denied the doctrine of the trinity. This stirred up such a row among both Catholics and Protestants that Servetus was obliged to leave Basel. He went to Paris and began the study of anatomy. The brilliance of his work

soon secured for him the degree of doctor of medicine. To Servetus belongs the honor of having independently shown that the ventricular septum of the heart is not perforated, thus disproving Galen's teaching. He contended that the course of the blood was from the right ventricle by an unknown way through the vena arteriosa (pulmonary artery) to the lungs, and thence through the arteria venosa (pulmonary vein) into the left ventricle, from which he said it was conveyed by the aorta to all parts of the body.

He described the valves of the heart and maintained that it was not active in fetal life. He described the changes which the blood undergoes in the lungs. This fact entitles him to rank as a pioneer physiologist. His attacks upon Galen were so severe and numerous that he had to leave Paris and went to Geneva. While resident there his attacks upon Calvin so provoked the followers of that ascetic theologian that they put him to death at the stake in 1553, in an effectual but horrible defense of their position.

The Italians believe that their countryman, Andrea Cesalpino or Alpinus (1519-1603), was really the discoverer of the circulation of the blood, and he did much of the work which led up to that great discovery. He was a great naturalist, a great anatomist, a contemporary of Vesalius, and was the first to use the word "circulation" in a description of the course and movement of the blood. He demonstrated the greater, or systemic, circulation and, by experiment, the fact that after ligation a vein fills from below. His words are: "This circulation of the blood from the right ventricle of the heart through the lungs into the left ventricle of the same, exactly agrees with what happens in dissection." He, however, maintained the idea of the efflux and reflux of the blood to and from the heart and apparently did not recognize the heart as a propulsive organ. He

thought that venous blood contained nutrient material and that arterial blood carried vital spirits to the tissues. He thought dilatation of the heart was caused by effervescence of the spirit in the blood, and contraction, or as he called it, "collapse," to appropriation by the heart of nutrient material. He imagined a communication between the arteries and veins, but did not appear to have thought of a direct flow from one to the other. In the first edition of his works, which was published in 1598, the year in which William Harvey entered the University of Padua as a medical student, he claims the discovery of the circulation of the blood, but modern historical criticism denies him that great honor. He held the chair of anatomy when Harvey entered the university as a medical student in 1598. He must have given enthusiasm and assistance to Harvey, but the record has nothing to say about it.

This sketch is incomplete without a reference to Gabriel Fallopius, of Modena (1523-1562). He taught anatomy at Ferrara and Pisa, and was professor of anatomy and surgery at Padua. He was not the first to describe the tubes named in his honor, but he first suggested their function. He was a man of great learning and influence, and shares with Vesalius the honor of restoring anatomical science.

The tremendous stimulus which the revival of Greek learning gave to the study of anatomy also extended to internal medicine. Among learned physicians who were also highly trained in philosophy and literature, the hope was keen that medicine might share in the general emancipation and stimulus of the age; and great industry and learning were expended in translating Greek classics, Aristotle, Herodotus, Galen, etc., from the original Greek into Latin, the current language of sixteenth century science. With two exceptions, the names of these workers are not of special interest to us. Thomas Linacre, founder of

the London College of Physicians, and court physician, was a man of great learning and influence. The other Englishman was John Kays, or Caius, an enthusiast while in Italy for clinical teaching.

Throughout this century Paris remained true to the Arabs and Avicenna. One of the great controversies of the rival schools was over the point at which blood should be drawn, near the seat of the disease, Galen's teaching, or remote from it, as Avicenna taught. The controversy finally involved the Pope and an emperor.

In the midst of this turmoil, Paracelsus appeared and increased it, attacking all systems and theories and substituting his own. He can only be classified as one of the eccentric men of originality and genius whose lives mark the course of history somewhat as cities do the trackless way of an aviator. His name was Philippus Aureolus Theophrastus Bombastus von Hohenheim. Born in Geneva, Switzerland, in 1493, he was an agitator and disturber of the peace of medical Europe to the end of his days. The son of a physician, he was educated in the learning of the time, but departed from the current custom in publishing his works in German. Throughout his life his personal arrogance was supreme. Early in his career he was called to Basel, where he began his lecturing by publicly burning the books of Avicenna and others. He declared his hatred of books and said he had not read one for ten years, despised his colleagues and insulted them in every way. Throughout his life he wavered between mysticism, magic and science, always coming back to science. He seemed to have been strongly under the combined influence of alchemists and the kabballists. The kabballah represented the Jewish theosophy which arose about the tenth century and flourished for several hundred years. One familiar with the writings of the kabballists might suspect the author of

"Science and Health" of carelessness and incompleteness in plagiarism. Paracelsus was a voluminous writer and rapid lecturer. His lectures were published by his hearers. In his system the human body was a microcosm which corresponded to the macrocosm, and contained in itself all parts of visible nature, sun, moon, stars and the poles of heaven. To know the nature of man and how to deal with the human body, one must study not anatomy but all parts of external nature. He thought life a perpetual germinative process controlled by the indwelling spirit which he called "Eus," or Archeus, and that disease is not natural but spiritual. Nature is equal to the cure of most diseases and art need interfere only in cases in which the internal physician, the man himself, is tired or incapable. Then a remedy should be used which was antagonistic not to the disease but to the spiritual seed of the disease. These remedies he called Arcana. Their choice was indicated through physical properties or by fancied resemblances to certain parts of the body. Out of this idea arose the doctrine of *signatures*, which became extremely complex. Paracelsus originated chemical remedies as distinguished from Galenical medicines. He also introduced antimony into medical use. He introduced the tincture of opium, or *laudanum*, a name it still bears. He is at times called an organicist, because he located disease in the organs of the body. Paracelsus also ranks as one of the great surgeons of his time. He saw military service in Denmark, the Low Countries and Italy. His principal surgical writings were two books entitled, "Minor Surgery" (*Die Kleine Chirurgie*), and "The Handling of Large Wounds" (*Die grosse Wund Arznei*).

The development of clinical teaching was the third great advance in internal medicine in the sixteenth century. It flourished notably under Giovanni de Monte or Montanus (1498-1552). Stu-

dents flocked to him from all Europe and England, from Germany especially. His lectures are said to be good medical reading today. There was also a limited amount of investigation through post mortem examination. The "sweating sickness," or "English sweat," and syphilis acted as a stimulus for study.

The century furnished one more surgeon who must be mentioned, Ambrose Paré (1510-1590). He began his career as apprentice to a barber surgeon in Paris and a student at the charity hospital. He was the son of poor parents and won his success and fame purely upon the charm of his personality and the quality of his work. To a certain extent he apparently owes his greatest discovery to an accident. It is said that in the campaign of Charles V. in Piedmont, in which Paré was serving, the supply of hot oil with which all surgeons then arrested hemorrhages gave out, and that Paré used threads or ligatures for that purpose. Another account says, "He had the temerity to use a simple bandage to avert hemorrhage." But no matter how the custom originated, it was during the Piedmont campaign and was due to Paré. The use of ligatures for the arrest of hemorrhage, for the first time made major operations on a large scale possible, and gave great impetus to the practice of surgery and very greatly extended its field of operations. Just about this time two changes in warfare occurred which contributed opportunities which Paré's genius made excellent use of. These were the increasing use of firearms and the change in military strategy. It is interesting to observe that the use of armor ceased not because it did not protect from the missiles then used, but because a change in military strategy compelled its abandonment. At that time long marches and rapid movement of troops began to be employed, and Sir Edward Hawkes "found that a bowl of wine was a bet-

ter protection for a tired soldier than the thin corselet he provided."

The appearance of new forms of wounds gave new surgical problems which the genius of Paré eagerly seized. But besides surgical genius, the manner and character of the man made him the idol of the army. A quotation from his writings is interesting in this connection. He wrote: "For my part I have shared freely with all persons the gifts which God has conferred upon me, and for that I am none the less, just as the luminosity of the candle is no whit diminished although many come to light their torches."

During this century general surgery made good progress. The use of the staff, or "apparatus major," in cutting for stone, was one of the advances. It was long kept a secret in the family of one Lawrence Colot. Plastic surgery was revived and ophthalmic surgery was rescued from the charlatans. To summarize, the sixteenth century was remarkable in medicine because, with philosophy and literature, it shared in the remarkable intellectual revolution of the time. In anatomy, the advances were two, additions to and corrections of the teaching of Galen, and the preliminary work which led up to Harvey's discovery and demonstration of the circulation of the blood.

In medicine there was a general revival of Greek learning which carried with it increase of general knowledge and initiative; the appearance of *Paracelsus*, which acted as an intellectual ferment and left some genuinely good results; and the appearance of new forms of disease together with the establishment of clinic-teaching. In surgery, Paré introduced the use of the ligature for the control of hemorrhage from large arteries and made amputations on a great scale possible.

The Kerekhoff Building.

ILLEGAL PRACTICE OF MEDICINE IN LOS ANGELES.*

BY H. T. MORROW, ESQ., OF THE LOS ANGELES BAR.

Gentlemen:—You, as physicians, are responsible for the unsatisfactory conditions surrounding your profession. Your Association having been, I understand, in existence for something like forty years, I doubt very much whether there is anything which I can say to you concerning the illegal practice of medicine which would startle you. I am going to tell you some of the things that I have learned during the past year in regard to the illegal practice of medicine, and will speak exactly as I feel and have felt in regard to these things during the time I have handled the work for the State Medical Board. Either you know of the existence of the things I am to speak about, or if you do not know of them you ought to, in order that you can squarely meet the issue and bring about the necessary reform.

The lamentable fact presents itself that outside of this hall, you, as a body of men and women, amount to nothing, have no influence, political or otherwise, and your organization means nothing with the courts or with the people at large. I feel that I can speak to you in this way, for I not only represent the Board of Medical Examiners, but also represent in this locality your State Medical Society, and I understand that each member of this Association is a member of the State Society. I therefore speak to you of these matters clearly realizing your difficulties and with a sympathetic interest in them. I had not met your able Secretary, Dr. Kress, until about a week ago, but I received from him from time to time notes asking that the practice of such or such a person should be investigated. You cannot expect your Secretary to bear all the brunt of this work, and if you wish to get results you will have to individually take

more interest in these affairs than you have in the past.

Unfortunately in past years the work of the Board of Medical Examiners has been necessarily more or less spasmodic. With only limited funds, and sometimes without the active co-operation of the County Association, no other result than that obtained in past years could be expected. Most unfortunately some years ago this work was carried on by an attorney who was generally said to be unreliable because of his use of intoxicating liquors, and the detectives employed to obtain evidence were dishonest and took money from the people they were trying to convict. Another detective, by the name of Jordan, borrowed money rather liberally from as many members of your Association as he was able to and likewise from the people whom he should have been prosecuting. I blame you people for not taking such an interest in the local work that these things could not exist. It is almost impossible for the Board to know in San Francisco with any accuracy what is being done at all times in Los Angeles, as they have the whole state to look after. I notice by your Bulletin before me that your Secretary is making an earnest plea for you to raise your dues a dollar or so a year. To accomplish lasting results and to clear the situation it would be well for each one of you to donate a hundred dollars a year. Your financial return would be immediate and certain, for the crooks and quacks are robbing the people of thousands and thousands of dollars a month, a legitimate portion of which should go to you ladies and gentlemen. The financial part of it, nowever, is the most insignificant, for the injury to your profession and the

*Delivered before Los Angeles County Medical Association, December 1, 1911.

injury done sick persons by these crooks cannot be measured in money value.

You cannot expect to employ lawyers, and you cannot employ detectives for a pittance. You must necessarily employ specialists in these particular lines of work, some who know how to catch these people, and others who know how to convict them. And the necessary organization takes a great deal of moeny. To employ the class of people you have sometimes employed in the past in these matters, means that you might as well throw your money into the Los Angeles river. Ordinary corporations, to say the least, pay their attorneys from twenty-five to fifty dollars for every day engaged in anything like similar work. The State Board is more than willing to be liberal, but is absolutely unable to pay the fees and the expenses they would like to. I would be ashamed to tell you what I received for a year's work and worry. Had I been working for the mere money there was in it, I would have made more in one ordinary month's practice than in my year's work. Personally I lost practically two thousand dollars trying to get you extraordinary results and we succeeded in putting more of these rascals out of business than had been driven out for many years. I expect, in order to complete the job, to devote another year to the work. You have in Dr. Tisdale, the Secretary of the Board, and upon whom falls most of the executive work, a great power, a man who is always up and fighting—an ideal man for the situation. The other day when I met Dr. Kress in his office I found him working himself to death over your matters and having to neglect his own business. While he is doing this work for you for nothing, I suppose the money he would be receiving for consultations or some intricate operation is going elsewhere. In your place, I would pay my secretary a hundred or two hundred dollars a month to see that first-class attorneys

were employed, (and that they receive enough to keep them employed), and that the work went on without spasms and jerks, but like a steam-roller. I am not making any plea for my own retention in this position, as it is my purpose to resign as soon as I can say that the work is so that I can leave it.

We have filed up to this time some thirty-three complaints in the police courts in this city. I had expected that the work would not be so intricate but that I could have a very able clerk whom I had, try the cases. However, I thought I had better try one or two cases myself to begin with so that the work might be started smoothly, and found the work so difficult that I have tried each case myself with the exception of one or two tried while I was out of the city. I do not pretend to be a criminal lawyer, and had been in the police court but two or three times during late years. However, my police court experience has been supplemented by my last year's work. The first thing that I ran into was the request that the district attorney (who had charge of such misdemeanors committed within the city at the time we took up the work), be represented at every trial. It was therefore necessary not only that cases should be set on dates satisfactory to myself but to the district attorney's office. The cases were set generally at least ninety days ahead, every defendant demanded a jury, and were represented by the ablest attorneys. Though I tried my best to have the cases set for early dates we were unable to accomplish it. The amount of work involved in preparing the evidence in these cases, getting them ready for trial and trying them was enormous. In fact at first the work looked more or less hopeless for we met such prejudice with juries, judges and others that satisfactory results did not appear to be anticipated. However, I had taken this work and I meant to carry it through. After a great deal of persistent work,

we have gotten convictions in about ninety per cent. of the cases. Sometimes we have found it necessary to arrest one defendant four or five times and yet they persist in trying to do business, waiting for a time when they expect, as in the past, our work may cease. One of the judges one day sentenced a defendant to sixty days straight in jail, and in another case the jail sentence was suspended, providing the defendant quit practicing. The result of these decisions, which were nothing more than right, was immediately felt. We have succeeded in driving dozens and dozens of these men and women from the city, they leaving for greener pastures. The most important thing to bear in mind is that when you once attain the position, you must not let the work cease or allow these people to think that they can slip back into town and start all over again, their fines being but a small portion of their earnings. They have neither character nor reputation to lose nor anything else that people ordinarily value, and it is only by jail sentence or extremely heavy fines that they can be conquered. Without any reservation, I can say that the people you are fighting are as a class crooked, incompetent and extremely vicious. They will stop at nothing to accomplish their end. That they are desperate is shown by the fact that they offer money for immunity, threaten us with physical injury, to poison myself and any one else employed in the matter, and in fact to do many other vicious things that fortunately they have not the nerve to carry out. As a sidelight I might mention that one man came to me and offered me a thousand dollars if we would let up on him. This man was a regular practitioner under investigation, and a few days after he had made his offer he was indicted by the Federal Grand Jury upon evidence obtained and presented by myself. One of the most vicious men we have had to deal with died shortly after we arrested him. This

man had killed many innocent women, and doubtless some of you gentlemen came along and signed death certificates for erysipelas, stomatitis, or other long-sounding names that had nothing to do with the cause of death and that covered a multitude of sins. A certificate would state that the patient died of heart disease when in fact an abortion had been performed and the foetus buried in the patient's back yard. I have realized that practically always you have nothing but a suspicion of something wrong that has gone before, but it is that suspicion which, promptly reported, would enable us to drive these abortionists from the city.

Your Association should have a much wider influence, and had I had you solidly back of me during the past year, there are a great many things I could have accomplished that I have been unable to do alone, and many things that have taken months to do could have been done very much more easily. When I started in the work it seemed that the courts were not in sympathy with our prosecutions and there seemed to be a feeling amongst the police judges and the court attaches that the Medical Board was the representative of some tremendous medical trust, that its only object was to put out of business those who were not connected with it. It has taken many months to correct this wrong impression and we now have, I believe, the respect of all the judges, and all that we ask or want is an even break in the prosecution of our cases.

The abortion advertisements which ran in the daily papers here so many years were a disgrace to the community, and it occurred to me that it would be possible to exclude such advertisements from the papers. Some of the more experienced members of the Board, however, recalling their past experience in such matters, assured me that it would be impossible to accomplish any such result. However, I took the matter up

with the newspapers. At first they only smiled, but ultimately they saw the righteousness of our contention, and upon my presenting to them proper affidavits, the Times, Examiner and Herald commenced to cut down the abortion advertisement column, until today you cannot find an abortion advertisement in any of the papers. This was not all accomplished without a great deal of sincere work, the newspapers, however, being extremely courteous and fair. In one instance it was necessary to show that we were prepared to take the matter up with the United States postal authorities, unless our suggestions were followed. You gentlemen have sat around here and watched this condition exist all these years and neglected to tackle the proposition. You can see that with your Association the result could have been accomplished much more easily than I accomplished it. When I took the matter up with the newspapers, I invariably presented affidavits on my own responsibility, not having authority to involve the Board in actions for libel, and therefore had very little to back me up in my contentions. Undoubtedly I am the most unpopular man in the city amongst the newspapers, for we have lost them, outside of any unlicensed medical advertisements, something like three or four hundred dollars a month which they derived from these abortion columns.

Many interesting things occurred in connection with the work. For instance, your friend, Dr. Harry Brook, who runs the "Care of the Body" section of The Times, had a little notation in his newspaper in reference to the percentage of abortions committed by different schools of medicine and stated that in the recent raid it was discovered that only one per cent. were performed by his own school, the naturopaths. I immediately wrote him in regard to his statement and stated amongst other things: "If you refer to the work done under my direction, I want to say that your figures are

not correct." When a man makes an attack on your profession and you do not answer, people naturally believe it is true. I had read time and again in articles by Dr. Brook that if you want to find the abortionists you should go right into the medical profession and amongst the regular school and you would find them. If this were not correct, then it should be answered; and if correct, it should be remedied. His concrete statement in regard to the percentage of such illegal operations was absolutely incorrect, and I wrote him that if he had any information along that line I would investigate it. I particularly referred to my willingness to investigate any operations performed in hospitals, he having particularly mentioned such matters; wrote him that in the investigation and prosecution there would be no discrimination between those who had certificates and those without certificates, or in regard to the school of medicine to which they belonged. He replied that it would be a pleasant and novel experience to see the State Board give justice to the regular school, and added that heretofore the State Board had been anxious to maintain the closed shop in order that worthy practitioners of other schools should be kept out. However, in answer to my request for information he replied, and this shows the weakness of his position: "I note your invitation for me to inform you of any cases of which I know," (referring to abortion cases). "I am not such a fool as to buck up against an association that has a defense fund." If he refers to the twenty-five dollars which your bulletin states you have remaining in the treasury, he is evidently very much misinformed as to your financial condition. Perhaps he thinks you have the ten thousand dollars back of you that you should have instead of only twenty-five dollars with which to keep up your end of the procession.

It is my idea that an able man like Dr. Brook should be taken into your confidence, and that you should listen to his arguments, and be to yours, until he would not fall into the error of in any way misrepresenting your position, at the same time keeping his own particular ideas of the correct treatment of diseases. You cannot expect every one to agree with you, but you can expect all reasonable persons to listen to reason. Dr. Brook in his correspondence with me stated that the city "is full of damnable scoundrels, who have licenses as M. D. hanging in their offices," practicing as men's specialists. Every word of this statement is true, and there is one thing you cannot get away from, and that is that these scoundrels are physicians and surgeons, belong to your profession, and as they are judged your profession will doubtless be judged. Until they are wiped out you will have to bear the opprobrium. In writing to Dr. Brook I stated to him that I was not controlled or directed in any way in my employment, that the present so-called raid had been instigated by myself, was not intended to weed out the small ones, as he claimed, and that when I could not carry on the work without fear or favor, I would get out of it. In return I believe Dr. Brook has given me his confidence and has helped me in every way that he could to clear up the general situation. He is a great power in himself, and I expect a great deal more of valuable assistance from him.

You have various classes of men and women carrying on an illegal practice in this city and vicinity. There are the Chinese, some of them more or less intelligent, but none of them, so far as I have been able to learn, pretending to be educated physicians and surgeons. They did call themselves "Doctors," but now they call themselves "Herbalists," and soon we will have them selling tea. They are organized, have been through the fight many times, know all the ropes,

and have able attorneys employed. Their attorneys fight their cases as though the defendants were charged with murder. They can furnish bondsmen in any amount, exhaust in jury trials venires of from seventy-five to one hundred and fifty men, and if they lose appeal the cases. Some of the trials lasted two and three days each, and nearly all of the cases tried are on appeal to the Superior Court upon questions never decided in this part of the country. In one of the cases heretofore mentioned the Judge gave a straight jail sentence of sixty days, which was well deserved, and the influence on the defendants was immediate. You must realize that judges in strictly enforcing the law incur the enmity of all of these crooks and quacks, and after a judge takes a decided position in such a matter, I intend to let him know that his action is known to the whole medical profession and that he will receive the support of the community to which he is entitled. These Chinese doctors diagnose disease by the pulse, and no greater farce or swindle was ever carried on. We have one woman whose alleged disease was diagnosed seven times in two days, and she was treated for at least five different kinds of disease—from none of which she was suffering. In fact, these Chinamen, with one or two exceptions, do not pretend to be running anything but an open swindle.

Another class of unlicensed practitioners are those white men who hold themselves out as doctors and are either persons who know nothing of medicine whatsoever, or have had some course in a fake medical college, calling themselves mechano-therapeutics, New Zealand herb doctors, etc. Often they are persons who have exhausted the clairvoyant, spiritualist and hypnotism game, and see another more lucrative field towards which to turn their endeavors. In many cases we have found that they use their supposed profession as nothing but a cloak to cover their attacks upon weak-minded

women. As a general rule they are first-class quacks. These pretenders are generally unsanitary in the work they do and are positively dangerous to the community. One of this class was so bad that had we not succeeded in putting him out of business, it would have been necessary to call in the health authorities to close up his place. Notwithstanding the contempt in which detectives are generally held, I must take off my hat to those who have served us, for I have found them almost without question honest, painstaking and willing to do work that is certainly of the most dangerous character. Moreover, I have found that they are fair towards the person under observation or prosecution, and this is the most important factor in accomplishing results. These operatives who must drink various Chinese medicines, and have dirty and unclean instruments thrust down their throats, after seeing them wiped off with a dirty towel hanging over the back of a chair, should almost be classed with martyrs who have given up their lives for the advancement of the medical profession. Instead of this they are subject to every insult and low-down insinuation that is within the power of practiced crooks and their able advisors to suggest. I have talked to many people who criticize your profession and I have often found the trouble to be that in their ignorance and lack of education, they fail to distinguish between regular, ethical and high-minded physicians and those *claiming* to be physicians. The poor, weak-minded boy who has been fleeced of his last dollar of savings by some advertising or museum-running specialist, and the blind man who has paid his last five hundred dollars for useless magnetic treatments, and the poor mother who is paying half of her wages for useless treatment for her sick child, should appeal to your Association to the extent that you see such conditions do not continue to exist.

One of the most vicious class of

crooks and one that has flourished here for many years, is the abortionist class. Some have no certificates to practice and some have. They have been doing a most flourishing business specializing in committing criminal abortions. In fact, they do not pretend to do anything else. On an average each of these professional abortionists makes probably twenty-five dollars a day, but those who are well known and advertise probably make on an average from one thousand to fifteen hundred dollars a month apiece. These people make no bones about the business carried on by them, are fearless of prosecution or of the law, and they may well be so when we consider the proof that is necessary to establish a case against them. Just as persons in the ice business or the lumber business, or in any other business, are thrown together and form associations for their mutual benefit and protection, so the professional abortionists are thrown together and have a well defined association for their mutual protection and for their mutual violation of the law. They have their detectives and their attorneys, their bondsmen and their paraphernalia of organization. Some of them are very clever operators and others are unsanitary, brutal and absolutely unskillful in their work. There were 5571 living children born in this city last year, and there were more than six thousand abortions performed in the city in the same length of time. It is a horrible state of affairs when we consider that the death date of these little children should exceed the birth rate. In fact, there is not only this abortion work going on day after day, but there is also the crime of infanticide committed very often. It is stated, but whether correctly or not I am unable to say, that certain undertakers for compensation will bury the bodies of little children, who have been taken under such conditions, with the bodies of other persons. I will say that there are ten well-known professional

abortionists working in this city. We have reduced their number very considerably since we started in, and in a short time we hope to drive them from the city entirely. In the course of my work I have talked to at least five of the best known professional abortionists and they openly admit the character of the work they are doing. One of these men, C. H. Carleton, in my conversation with him, told us that he would do whatever we wanted him to do, that he would suspend practice, etc. We told him that we would not allow him to quit, but we would make him quit, and subsequently the Board on our presentation revoked his certificate. Affidavits in our possession show that one firm alone produced more than four hundred abortions between October 19th, 1910, and March, 1911. We do not intend to let up on these people until we have driven them from the city, make them quit business or go to jail. They cannot stand the strain of continued surveillance, and from mere economic necessity will be forced to seek a city where their work will not be investigated. I am not unmindful of the criticisms that can be made of my own profession in that they assist and aid these abortionists and others in evading the law and escaping from the law when they are caught. In fact, some attorneys are nearly in co-partnership with those they are defending.

There is still another class—"vampires," as our good friend Brook calls them,—specialists for men only, who, so far as viciousness is concerned, are in a class by themselves. No scheme to obtain money from unfortunate men is too low down and detestable for these despicable scoundrels to work. They employ cappers who bring the cases to the case-taker, who turns them over to the doctor, who brings in the "great European specialist;" and by the time they get through with the victim they, generally, by their terrifying statements re-

garding his condition, get all the money he has or can possibly raise. The receipts of these specialists are enormous, for it makes no difference to them whether the patient has a disease or not, they make him believe he has and gouge him just the same. I have neither time nor inclination to tell you further of their horrible doings. It is sufficient to say that they are not to be allowed to continue their nefarious work without interruption. I have prepared a bill which will take from their partners, the newspapers, the right to insert in the newspapers such advertisements as they have been carrying, and I hope with your assistance and the assistance of the Board to obtain the passage of such a bill by the next Legislature. It is not an impossibility by any means.

Now I wish to say to you that if you do not put your shoulders to the wheel to correct some of these conditions, you are going to have a day of reckoning yourselves. The State Board cannot do all this work for you, for in the first place they have not sufficient money to accomplish such a Herculean task, and in the next place it requires more than money—your persistent and solid support. If you will individually lend your aid and will send in the information as you, and only you, can acquire it, you will be able to accomplish in the next year twice as much as we did last year. I would impress upon you the necessity of solid organization, for your opponents are closely organized—the Chinese with their mutual bond of protection, the so-called liberal practitioners with a membership of about one hundred and seventy-five with their detectives and able lawyers, the league of medical freedom, well financed, and ably generalised, and the league of free and easy professional abortionists, the latter desperate, foul, fighting murderers, some of whom will stop at nothing to be allowed to continue their unlawful business.

Happily, the legal end of your fight is in the hands of one of the ablest lawyers in California, Walter Kaufman, Esq., of San Francisco, and the thing that I would especially impress on you is the necessity of keeping a man of his high character and ability at the head of the legal department of your work. In order to do this, you will have to properly compensate your attorneys, and when I leave off your work (for I presume I shall not be foolish enough to continue it for many months longer), see to it that you yourselves provide sufficient compensation for an attorney to keep interested in the work. The personal information that a lawyer acquires in regard to the habits and conditions surrounding these illegal practitioners can hardly be passed on without a great loss in the movement of the necessary machinery.

Lately I have put up to one of the newspapers the proposition of their excluding all unlicensed advertisements from their newspapers. When I went to see them about it they asked me whom I represented, and I told them I represented myself, and we had it out very strong back and forth, they claiming that I was trying to run their business, that they had already done more for me than they should, and they would not stand for it. It became necessary for me to write them that I intended prosecuting one of the members of the paper for aiding and abetting in committing a misdemeanor. As a result I can say that, practically speaking, this newspaper will not carry any more unlicensed advertisements. If I had had back of me your organization, this would have been accomplished very much more easily. I could tell you of many more interesting features of our work, but I am afraid I have already tired you. We have various methods of working and through many different sources obtain our information. But above everything I would impress on you again that we need your

moral support and backing, and your continued interest in the work that is going on. I believe in a liberal interpretation of the Medical Act, so as to allow all honorable persons who can pass a fair examination to practice, and I have not in my work so acted as to favor any one school of medicine. It is only the quack and crook, wherever we may find them, licensed or unlicensed, whom I have taken any interest in putting out of business, and I know that that is and will be the moving spirit of you all, which will mean ultimate success in clearing up the chaotic conditions surrounding your profession.

I thank you for your earnest attention and trust that we will be able to clear up these unfortunate conditions.

I. W. Hellman Building.

TETANUS TREATED WITH SERUM.

Baccelli, of Rome, says that antitetanic serum has proven a great disappointment in the treatment of tetanus, no matter which way it is introduced into the system. Carbolic acid, given subcutaneously in sufficient dosage, is still the best remedy at our disposal. A 2 to 3 per cent. watery solution is employed. At first, about 0.3 to 0.5 gm. of the acid are injected daily to test the tolerance of the patient. If the urine remains free as much as 1 to 1.5 gm. may be given during the 24 hours. Larger doses should only be used cautiously in very severe cases. According to the author's statistics, the mortality in severe cases could be reduced from 100 per cent. to 2.12 per cent., in very severe cases from 100 per cent. to 18.5 per cent. In large percentage of the worst cases, less than one gram daily was injected, so that the statistics here are no proper criterion for the action of the drug. If desired, the acid may also be injected dissolved in sterile oil.—*Berl. klin. Woch.*

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EDITORIAL

BALZAC'S LOVE AND NEURAL- GIA.*

The World knows Balzac intellectually through his unsurpassed fiction, but it never would have known of the great tragedy of his life, had it not been for his correspondence with Madame Hanska.

She was of a noble family, herself a countess, refined and leading a life of leisure in a country region far from all the charms of cities, and often left alone by her husband for months together. This gave her ample time for reading foreign literature, and the magic of Balzac's "Genius" so impressed her that she dashed off a letter to the great author. She therein expressed her fears that a noble and powerful genius was about to take the wrong road.

While earning large sums of money, he was constantly involved in great pecuniary troubles, struggled, like the Titan that he was, night and day, with a tremendous energy which puzzled his physician, alarmed and appalled his enemies, and sometimes amazed himself.

In order to carry out his huge contracts with publishers, he had conceived the idea of beginning work at midnight, a period which with him was peculiarly favorable to literary composition, and writing without repose or other refreshments than strong coffee until noon. Then he varied his task by a very light repose, without, however, leaving his work table, and began the nervous and exasperating work of correcting the proofs which came to him from his printers. At this he toiled with unflagging energy, even changing the structure of whole pages, and sometimes

*The Love Letters of Balzac (1833-1842) Two Volumes, London, Downey & Co., Limited, Covent Garden, W. C. The Westminster Review, November, 1911.

sending back such a mass of crossed and only half legible lines that the compositors were in despair. The proofs despatched, he would plan the work on which he was to begin another round of exhausting toil, and sometimes would be seduced into writing half a dozen pages. Then, after sixteen or seventeen hours of brain and hand work, having in a single day accomplished almost as much as most modern literary men do in a fortnight, he would write a huge package of sheets filled with love and longings to the Eve of the far-off Russian woodland.

In his modest lodging in the Rue Casini, near the Observatory, Balzac turned day into night by closing the shutters of the windows, covering the walls with black hangings, and lighting many wax candles, which threw a strange glare upon the burly figure of the young author, clad in a monkish robe, for he would not even dress lest he might be tempted to leave his beloved toil before he had accomplished his allotted task.

In writing to his unknown correspondent, Balzac said: "My destiny is to paint the happiness that others feel, and to desire a complete felicity without ever finding it. It is only those who suffer who can describe joy, because one expresses better that which one imagines than that which one has felt."

Through these intense letters from time to time, he gives one an idea of his eccentric methods of life. In pouring out his soul in a letter dated October, 1833, he says: "Poor Angel, I should much better like to recite for you the love of which my soul is full for you, than to tell you my tribulations. As for my day, it is irrevocably planned

out, as I think I have already told you. To bed at six in the evening, after my light dinner, and up again at midnight. I am here, leaning on this table, of which you already know so much, seated in this chair of which you have so often heard, in front of this fire-place, which has warmed me for the last six winters, and here I stick daily until noon. Then come business meetings, and the small details of existence with which we are obliged to occupy ourselves; later, at four o'clock, a bath; then, at five, a light dinner. And afterwards I begin again swimming in work, robed in the white gown with the silken girdle, of which you by this time must have heard enough."

As it will be seen in these letters he was often writing four or five great stories at one time. Again he says: "After twelve hours of hard work one must have a bit of repose, and today I shall repose in suffering."

A few days later Balzac was seriously ill, more seriously than he was willing to admit in his letter to Eve.

"A little attack of neuralgia was here yesterday," he wrote. "It is a secret between myself and my physician, who made me swallow a few pills. Although he told me that my illness was directly due to an excess of overwork, and though I am unwilling to believe that pains of the heart awaken the nerves of the head, I still think of suppressing two more hours of sleep out of those that I have given to myself. Your last letter (evidently one of explanation, and possibly one of confession), touches me to the heart's core. I will go to Geneva; I will stay there this

winter. That will at least deprive you of the right to indulge in suspicions. Though it should cause me a thousand misfortunes here, I will go to Geneva, and I will there forget everything in contemplation of the only heart which gives me life. Farewell! Did I ever tell you the story of the man who was obliged to write gay drinking songs to get money with which to bury his adored wife? To work with the heart in mourning is my destiny until your next letter comes. I do not know that you have a fair idea of what I have before me in order to get away from Paris. I must have finished reading the proofs of four volumes, must have settled up five difficult cases, paid out eight thousand francs,—and please to remember that the four volumes make one hundred sheets or 100 by 16 pages, each one to be gone over three or four times, without counting the corrections in manuscript! I shall lose my sleep; I will risk everything, and you shall see me at your side on the twenty-sixth!"

In the next letter is a little revelation of the fears which Balzac's tremendous efforts excited among his friends, and of the attitude of his physician to this using up of nature's capital at such lightning speed.

"Alas!" he wrote to Eve, "All that I have been able to do is to get one hour taken off from my sleep! I must, it appears, have five hours. My doctor, who has known me since I was ten years old, and whom I saw this morning, is constantly professing that my work alarms him. He has threatened me at last with inflammation of the integument of the cerebral nerves. 'Yes, Doc-

tor,' I said to him, 'if I were burning the candle at both ends,' but remember that for the three years past I have been a veritable anchorite, that I drink neither wine nor liquors, that my food is weighed methodically, and that the sudden awakening of my appeased neuralgia came less from labor than from chagrin.' The doctor started back, and after taking a long look at me, he said, 'Really, your talent costs you heavily. You are right, those eyes of yours testify that you are not given to pleasure.' "

But the doctor's advice did him no good. In the next paragraph he wrote: "There are three printing establishments at work on the four volumes of which I wrote, and none is making the proper progress. As for myself, from midnight to noon I write; that is to say, I sit twelve hours in my chair improvising in the full force of the term. Then from noon to four o'clock I correct my proofs. At five I dine, at half-past five I am in bed." So he had gone directly back to his old programme. And again,—"coffee no longer does me any good. I must stop drinking it for awhile; perhaps then I shall feel its old stimulating qualities again."

It was not until the end of 1833 that he saw for the second time the Eve who had been so much to his inner life. His health was already broken. During the last period of the work upon "Eugenie Grandet" he wrote eighteen hours a day, and as he himself confessed, kept down the general irritation of the nervous system produced by this tremendous strain, only by taking a great number of baths daily.

It was seventeen years after Madame Hanska wrote her first impulsive letter

that she was united to the man she had adored, only to have him taken from her by the tyrant death just as their felicities seemed complete.

When Victor Hugo stood beside the dying author's bed in the mansion in which Balzac had at last come to live with the Eve of his devotion, the great poet was amazed that the mighty romancer, who had scarcely touched his fiftieth year, looked so old and worn. But to his serene temperament, such vast excesses as those of Balzac were so foreign that perhaps he could not fully appreciate them. Instead of wondering at Balzac's premature old age, all the world that knew of his career would have wondered that he lived so long. He died happy, for he died in the full realization of a pure love which had upheld him through some of the bitterest trials that ever fall to the lot of man.

RABIES A PREVENTABLE DISEASE.

In England, Germany, Scandinavia and some isolated cities of Europe rabies has been eliminated through the very simple measures of prevention. This fact is conclusive proof that that disease can be eradicated anywhere under similar conditions.

The continued presence of the disease here is due to three factors: misplaced sentiment against compelling all dogs to wear muzzles when outside of their owners' premises and not on a leash, a disposition among many people to question the existence of the disease, and indifference toward reforms of all kinds. Even among doctors of medicine some deny the existence of such a disease,

notable among them Dr. Chas. W. Dulles, who several years ago sent occasional articles to the medical press in which he tried to prove the non-existence of true rabies.

The limits of this note compel bold assertions rather than an orderly array of proof, but successful contradiction is impossible or the claim that rabies is a serious menace to human life in this country, and that it can be absolutely exterminated by adequate muzzling of dogs.

The greatest, and at present insuperable, obstacle in the way of such an achievement is the mistaken sentiment toward their pets, on the part of owners of dogs. It is clearly up to the doctors to convince their friends, and through them the general public, of both the importance and easy possibility of this reform.

In addition to putting muzzles upon all dogs at large upon the streets, all dogs should be safely confined for a few days of observation which show a *marked change of disposition, unusual churlishness or affection, or marked and unusual restlessness.*

These two very simple precautions, adequate muzzling of all dogs at large, and careful confinement of those which show suspicious symptoms, for a relatively short time will entirely eradicate the disease in this country as it has in others.

Those interested will find in *The Chicago Medical Record*, Nov. 15, 1911, the papers read in a very interesting symposium in Rabies at the meeting of the Chicago Medical Society, Oct. 4, 1911.

E. W.

OBSTETRICS IN THE UNITED STATES.

The distinguished professor of obstetrics at John Hopkins has a paper in *The Journal of The A. M. A.*, January 12, 1912, entitled, "Medical Education and the Midwife Problem in the United States."

Dr. Williams states that his own students "are unfit on graduation to practice obstetrics in a broad sense, and are scarcely prepared to handle normal cases." He believes these facts are due to poor equipment for teaching, and to too low a standard of entrance requirements.

The article permits the conclusion that Dr. Williams believes that the average medical college should make of its average student at the time of graduation an ideally cultivated, scientific obstetrician and a thoroughly competent operator in all possible obstetric surgery.

The remedy proposed is a limitation of the number of medical colleges, and the equipment of each survivor with an obstetric department, ideal in the size of its clinic, the number of its expert assistants and a professor and, of course, an equipment competent to make each graduate an expert operator in obstetrics. In short, the proposed idea is to provide only expert operating obstetricians and midwives.

The position taken by Dr. Williams is absolutely impracticable, and almost equally undesirable. There are no good reasons why every doctor at graduation should be a competent, fully trained operating obstetrician than that he should be equally expert in internal

medicine, general surgery and the other branches of the healing art. No medical training ever has, can, or will, so train all its graduates.

There is no good reason why the average family physician should not practice obstetrics, except incompetence, and if medical colleges are not able to make their graduates competent to manage ordinary obstetrical cases, neither they nor any other institutions will succeed in so training midwives.

A long experience in medical teaching, and much thought given to the general subject of teaching, have convinced the writer of this note that the failure of medical colleges to make their average graduates *competent to begin the actual practice of medicine*, is due more to poor teachers and to poor methods of teaching, than it is to inadequate facilities and to students inadequately prepared to enter the same medical colleges.

There is nothing required for the proper management of the average case of obstetrics, which cannot be taught, and well taught, to the average student in any college which belongs to the Association of American Colleges. Such a doctor needs to know: How to make himself, the nurse and the patient surgically clean and how to keep them and himself clean during the progress of the case; to have an accurate knowledge of a limited number of facts, which are easily understood; to have patience, average judgment and to know when to ask for help.

A failure to teach these fairly simple things is a failure to teach well. Dr. Williams' statement that his own

students are not taught to reach that limited standard of excellence is a confession of poor teaching.

A great advance in medical teaching will have been made when medical teachers realize, and profit by the conviction that no amount of reputation or learning or wisdom or eloquence on the part of a professor or assistant will atone for the lack of good methods of teaching. E. W.

NEW CALIFORNIA LICENTIATES.*

J. Taylopoelos	R
C. J. Lander	R
A. H. Currie	E
A. A. Husser	E
C. H. Brooks	R
C. E. Robinson	O
E. T. Rulison, Jr.	R
W. G. Goffe	R
M. A. Cramer	O
L. E. Rauch	O
L. S. Cushman	O
A. L. Brown	R
E. L. Enocks	R
Wm. P. Burnham	E
E. Cleverdon	R
A. P. Ward	O
H. O. Beeson	R
N. M. Salter	R
A. W. Hamme	R
T. H. Bly	R
B. S. Stevens	R
A. A. Nusbaum	R
C. E. Hyde	R
J. H. Brooks	R
C. B. Griggs	O
T. O. Luckett	R
E. G. Ghidella	R
M. P. Hamrick	R
Alfred Shryock	R
W. E. Weddle	R
T. H. Folkins	H
E. A. Julien	R
H. Rochester	R
F. P. Phelps	O
J. A. Cutting	R
M. J. Abramson	R
R. H. Johnson	R
G. P. Waller, Jr.	R
L. C. Frost	R
E. W. Elliott	R
T. Roller	R
L. H. Athon	R
A. C. Matthews	R
F. E. McCullough	R

*Examination held in Los Angeles, December 5, 1911.

M. G. Kennedy	O
G. E. Klingerman	R
E. H. Jacobs	R
F. J. Dingeman	R
C. J. Elmer	R
W. F. Holman	R
W. C. Porter	R
O. C. Willhite	O
M. Wiswall	O
O. H. Kress	R
L. E. Kress	R
T. F. Engstrom	O
A. E. Strong	R
S. G. Bay	R
W. A. George	R
W. V. Brem	R
M. Banta	R
J. Jacobs	R
W. J. Johnson	R
D. F. Harbaugh	R
J. C. Urquhart	R
W. F. Jordan	R
C. E. Ide	R
E. S. Weimer	R
P. H. Stephens	R
H. P. Shattuck	R
A. B. Perkey	R
P. M. Williams	R
C. F. Nelson	R
R. Purcell	R
L. E. Buren	O
M. E. White	O
D. D. Weaver	R
J. V. Barrow	R
W. H. Dower	R
C. E. Reynolds	R
R. S. Lavenson	R
E. C. Day	R
J. W. Nevius	R
R. W. Homer	R
F. Thomas	R
N. G. Noble	O
C. G. Shipman	R
W. F. Fressels	R
S. C. B. Sorenson	O
N. M. Jones	R
C. E. Frost	O
J. W. Scott	O
H. V. Magnusson	R
W. I. Merrill	R
B. E. Merrill	R
C. G. Wharton	R
W. C. Mabry	R
M. G. Gates	R
E. W. Mullen	R

Passed:

Homeopaths	1
Eclectic	2
Osteopaths	16
Regular	80

99

Failed:

Homeopaths	1
Osteopaths	19
Regular	24

44

EDITORIAL NOTES

Dr. G. P. Waller, Jr., has opened offices in Alhambra.

Dr. J. S. Allison, of Monrovia, has moved to San Diego.

Dr. O. G. Wicherski has removed from San Francisco to San Diego.

Dr. C. A. Tillotson has moved from Holtville, Imperial County, to Coalinga.

Dr. W. T. McArthur has been elected president of the Celtic Club of Los Angeles.

Dr. D. B. Northrup has recently been

reappointed county physician of San Diego County.

Dr. John W. Brown, age 72, formerly of Augusta, Kansas, died in Los Angeles, January 9th.

Dr. C. E. Gage has been appointed by Dr. Zerfing as assistant police surgeon of Los Angeles.

Dr. J. M. Baylis, of San Bernardino, has recently returned from a trip to New York and Philadelphia.

The engagement is announced of Dr. James W. Bazell, of Holbrook, Arizona, and Miss Maud Scott, of Los Angeles.

Dr. R. S. Lavenson, recently of Philadelphia, has located in Los Angeles, with offices in the Title Insurance Building.

Dr. Thomas E. Taggart, of Los Angeles, has located in the Union Oil Building, corner of Seventh and Spring streets.

Dr. Melvin Page Burnham, graduate of the Medical College of Harvard, has located in Hollywood, a suburb of Los Angeles.

The Medical Review of Reviews—Arthur C. Jacobson, M. D., editor, 206 Broadway, New York City—comes to us delightfully transformed.

Dr. Elmer L. Biggs, formerly of Hot Springs, Arkansas, is now located in the Title Insurance Building, corner Fifth and Spring streets, Los Angeles.

Dr. Thos. J. Orbison, whose offices are in the Auditorium Building, has removed his residence from Pasadena to the Hotel Darby, West Adams street, Los Angeles.

Dr. A. F. Hamman has been elected secretary of the Long Beach Board of Health, and Dr. W. H. Neuman was recently reelected health officer of that city.

Dr. A. M. Tuthill, chief surgeon of the Detroit Copper Mining Co., in Morenci, Arizona, has returned from a three months' post graduate course in New York.

It is reported that Dr. W. Carlson Smith, of Redlands, has discovered a quinine anesthetic and he recently went to New York to demonstrate it to the profession of that city.

The Supreme Court of Wisconsin recently ruled that false teeth are a necessity, not a luxury, and that a husband is legally bound to furnish them for his wife if she needs them.

Dr. Cecil E. Reynolds, lately of London, England, has located in Los Angeles and will be associated in office work with Dr. F. M. Pottenger (Union Trust Building) and will also devote himself to Internal Medicine.

Dr. H. E. Kirschner, who was for four years Medical Superintendent of the Iowa State Sanatorium at Oakdale, Iowa, has resigned his position to take up work at the Pottenger Sanatorium, Monrovia, Cal.

Dr. J. S. Gowan, graduate of the College of Medicine of the University of Southern California, Class of 1903, died at his home in Fullerton on January 26th. His body was brought to Los Angeles for cremation.

From a note in a recent number of *The American Journal of Surgery* we learn that Dr. John B. Murphy is suffering from the results of overwork and is unable to prepare a promised paper for that journal. Dr. Murphy's many admirers will watch impatiently for his complete recovery.

At a recent meeting of the San Bernardino County Medical Society, Dr. Geo. R. Gordon, of San Bernardino, spoke on the Pituitary Gland, and Dr. C. E. Ide presented a case of Congenital Malformation of the Heart.

Lieut. H. T. Bibber is now assistant surgeon in the Soldiers' Home in Los Angeles County. Lieut. Bibber was transferred from the National Home at Dayton, Ohio. He is a graduate of the Medical Department of Bowdoin.

At the meeting of the San Diego County Medical Society held on January 4th, the following officers were elected for 1912: President, V. G. Clark; vice-president, H. C. Loos; secretary and treasurer, B. J. O'Neill.

Dr. J. B. Baker, of Lompoc, California (Santa Barbara Co.), is about to change his location. He wishes to sell his residence to a physician for \$1800, and will turn his practice to the buyer coming with the right kind of credentials.

A Conference on Medical Education, Legislation and Public Health will be held at the Congress Hotel (formerly the Auditorium Annex), Chicago, Monday and Tuesday, February 26 and 27, 1912, the session to begin at 10 o'clock Monday morning.

At the recent annual meeting of the Pima County (Arizona) Medical Society, the following members were elected as officers for the ensuing year: President, Dr. H. E. Crepin; vice-president, Dr. George D. Troutman; secretary and treasurer, Dr. Meade Clyne.

Dr. T. W. Huntington, of San Francisco, addressed the San Diego County Medical Society at a dinner given on January 18th, at the Palace Cafe in San Diego. About fifty members were present. Dr. Huntington talked on the need of public lectures to the laity along Preventive Medical lines.

Dr. Reuben W. Hill, graduate of the Bellevue Hospital Medical College, Class of 1877, died at his home, Carpinteria, Santa Barbara County, on January 26th, age 65. He was a native of Arlington, Vermont, and served through the Civil War with the Mounted Rifles of New York.

Dr. H. C. Moffitt, of San Francisco, while on his way to Los Angeles recently, was robbed of pearl shirt studs valued at \$1,000. We are glad that the members of the profession of San Fran-

cisco are able to indulge themselves in such ornamentation, and regret that the gems have not been discovered.

The University of Paris is said to have 17,000 students; the Mohammedan University in Cairo, 10,000; the University of Berlin, 9,600; the Universities of Moscow and of St. Petersburg, each 9,000; while Columbia University in New York City has nearly 8,000, and the University of Southern California, of Los Angeles, 2,100.

At the meeting of the San Bernardino County Medical Society, at the home of Dr. D. C. Strong in San Bernardino, Senator J. L. Avey, of Redlands, spoke at some length on the powerful influence which was exerted upon the legislators at Sacramento to prevent the passage of any laws which might injure monied interests concerned in the manufacture and sale of patent medicines and adulterated food.

At a meeting of the Cochise County Medical Society, held in Bisbee, Ariz., December 9, 1911, the following officers were elected for the year 1912: President, H. R. Reese, Bisbee; first vice-president, E. W. Adamson, Douglas; second vice-president, H. T. Bailey, Courtland; third vice-president, L. L. Miner, Bisbee; secretary and treasurer, T. Watkins; delegate, G. A. Bridge, Bisbee; alternate, M. D. Cohen, Bisbee; censor, C. F. Hawley, Bisbee.

The Psychopathic Association of California met at the home of Mr. and Mrs. W. S. James, Los Angeles, on January 26th, at which time the following Board of Managers to hold office for two years were elected: Judge Curtis D. Wilbur, president; Dr. H. G. Brainerd, vice-president; W. S. James, secretary-treasurer; Judge George H. Hutton, Mrs. W. S. James, Mrs. O. P. Clark, Drs. L. N. Powers, C. H. Whitman, Ross Moore, Thomas L. Orbison, James T. Fisher, C. L. Allen.

The report of the result of the sale of the Red Cross stamps before Christmas was made by Dr. George Malsbary to the directors of the Los Angeles Society for the Study and Prevention of Tuberculosis, at Hotel Westminster. Two thousand one hundred and fifty-eight dollars and fifty-one cents worth of stamps were sold by school children and \$2389.04 worth by adults. There remains on hand \$1920.32 as clear profit. Fifty-four thousand three hundred and thirty persons received the literature on prevention of tuberculosis.

By the use of \$400 worth of anti-toxin, Joseph Becker, of Leighton, has been cured at the Allentown, Pennsylvania, hospital, of lockjaw, which was the result of a wound inflicted in a hunting accident when he was shot in the arm by a companion. Hospital doctors declare they never saw a patient who could absorb so much anti-toxin.

Dr. Frank B. Kellog, of Los Angeles, has been appointed a member of the Civil Service Commission of Los Angeles. Dr. John R. Haynes is also a member, so that the medical profession is well represented.

The meetings of the Los Angeles County Medical Association are largely attended. The meeting of January 19th was certainly a red letter event. Dr. Ward's paper was practical and valuable. Health Commissioner Dr. L. M. Powers opened the discussion on Smallpox. He was listened to with intense interest because every person realized that the speaker was one of high authority and wide experience. Dr. Thos. W. Huntington of San Francisco also spoke, referring especially to the necessity of being watchful as to the expenditure of moneys left for hospitals.

It was recently announced that President Taft had nominated Dr. Rupert Blue as Surgeon-General of the Health and Marine Hospital Service, to suc-

ceed the late Dr. Walter Wyman. The United States Senate unanimously confirmed this appointment, which became effective January 12th. This announcement gives universal pleasure to the profession of California. While Dr. Blue's appointment is accredited to South Carolina, yet we almost feel that it ought to be from California. We certainly do claim a deep and abiding interest in our new Surgeon-General.

The regular meeting of the Los Angeles County Health Officers was held at the Health Office in Los Angeles on January 20th. The object of these meetings is for the purpose of bringing the health officers in close relationship and to aid in a uniformity of action. There were about twenty-five health officers present. They decided on concerted action in the effort to exterminate squirrels and gophers. The next meeting of the Association will be held in San Pedro. The president of the Association is Dr. E. O. Sawyer, health officer of Los Angeles County.

The annual meeting of the Maricopa County Medical Society was held at the Adams Hotel, Saturday evening, December 2nd, at which the officers for 1912 were elected. Dr. W. Warner Watkins, the secretary, gave a very interesting demonstration with the Balopticon projection apparatus, recently purchased by that society. After the business session, a very elaborate banquet was enjoyed by the members present. The following officers were elected: President, H. K. Beauchamp; vice-president, Willard Smith; secretary, W. Warner Watkins; Treasurer, William Sargent; censor, W. W. Wilkinson; delegates, W. Warner Watkins and Roy Thomas.

"The Chinese children in Los Angeles, the United States and in China should abandon the old native dress and don modern American costumes," says Miss Margaret J. Chung, a Chinese girl of Los Angeles, who is striving to

be of service to her country in the present as well as in the future. Miss Chung, the first Chinese girl student in the medical department of the University of Southern California, is one of the leaders of the class and is striving to become efficient in her chosen career. She wishes to be prepared to take an active part in Red Cross work in China, should a war take place there before the settlement of the present internal troubles.

C. E. Sebastian, Chief of Police of the city of Los Angeles, says, "Harry M. Sherman, M.D., of San Francisco, under date of January 30, 1912, writes: "There has been a sneak thief going through the dressing rooms of the operating suites in the various hospitals in Portland, Oakland and San Francisco. He selects a time when operations are in progress, slips in, steals what he can out of the clothing in the lockers and slips out. So far as I know he has never been seen, but Drs. Stillman, Rixford, McChesney and various others have lost watches or money. He will probably be in Los Angeles before long. This is to warn you, and I would suggest that with the aid of some good Los Angeles policeman, a trap be laid for him and he be caught."

Dr. E. Arthur Carr, secretary of the State Board of Health of Nebraska and member of the Committee of the American Confederation of Examining and Licensing Medical Boards, has been inspecting the colleges in California. On Dr. Carr's invitation, we joined him in visiting The California Eclectic Medical School, South Hill street, Los Angeles. While the accommodations and equipment of this school are not extensive, yet they did appear to be doing serious work. They have in connection with the school a Botanical Garden from which they take the crude drug and make tinctures and fluid extracts in the laboratory of the

college. When we were there they were at work on Yerba Manse and *Phytolacca Decandra*. We think that the Eclectics are doing a useful work in keeping alive an interest in roots and herbs. There is practically no work of this kind being done in our leading medical colleges. Who knows what the whirligig of time may bring around?

On Thursday evening, December 22nd, the Maricopa Medical Society began a series of public health lectures, which are proving very interesting and instructive. The programme for the winter is as follows: Trachoma, Dr. L. D. Dameron, Dec. 22nd, 1911; Tuberculosis, Dr. Grant Monical, Jan. 4th, 1912; The Preventable Diseases of Children, Dr. O. E. Plath, Jan. 11; Garbage and Sewage, Dr. E. S. Godfrey, Jr., Jan. 18; Ventilation and Fresh Air as an Asset to Health, Dr. J. W. Foss, Jan. 25; Flies, Dr. Roy E. Thomas, Feb. 1; Milk and Dairying, Dr. Wm. H. Sargent, Feb. 8; Wells, Cesspools and Drinking Water, Dr. W. W. Wilkinson, Feb. 15; Venereal Diseases of Men, Dr. Jno. Wix Thomas, Feb. 22; Venereal Diseases of Women, Dr. J. W. Foss, Feb. 29; Fakes and Nostrums, Dr. W. Warner Watkins, March 7; Climate and Health, Dr. J. W. Foss, March 14. The Balopticon machine is being used in these lectures, which are under the joint auspices of the Medical Society and the Young Men's Phoenix Club.

As is well known, Dr. Harry Osear White is Professor of Anatomy in the College of Physicians and Surgeons of the University of Southern California. Like the late Corydon L. Ford, Dr. White is an enthusiast and devotes himself entirely to teaching. At a recent meeting of the Medical Faculty of the University of Illinois, Dr. D. A. K. Steele presented the following resolution: "Whereas, Professor H. O. White, of the Department of Anatomy of the Med-

ical Department of the University of Illinois, severs his connection with this college at the close of this season to accept the professorship of the Department of Anatomy in the University of Southern California in Los Angeles, and, whereas, Professor White has rendered distinguished services to this college by developing the Department of Anatomy to its present high grade of scientific

teaching of that subject, attracting the attention of his competitors in that field and securing deserved recognition everywhere, I move that this Faculty extend a vote of thanks to him for his years of efficient work in the college and wish him Godspeed in his new field of labor, and that a copy of this resolution be spread upon our minutes." Seconded and carried unanimously.

BOOK REVIEWS

MANUAL OF PATHOLOGY, by W. M. Late Coplin, M.D., Professor of Pathology, Jefferson Medical College. Fifth Edition, Rewritten and Enlarged, with Six Hundred and Twelve Illustrations and Twelve Plates, Eleven of which are in Colors. Price, Cloth, \$4.50. P. Blakiston's Son & Co., Philadelphia, Publishers.

General Pathology, covering Malposition and Malformation; Disease, Bacteria; Pathology of Infection; The Infections; Animal Parasites; Hypertrophy, Atrophy, etc.; Infiltration and Degeneration; Necrosis; Circulatory Disturbances; Inflammation and Repair; and Temperature Changes; comprises Part I, covering 376 pages, divided into 14 chapters. Much of the text has been rewritten. Old references have been dropped and new ones given. In most instances references to three articles are given, one English, one German, and one French. Rearrangement of the chapters has made the work more valuable for reference. Two new chapters have been added. Chapter V, on Pathology of Infection, groups general facts so that the relation of clinical and pathological data are logically demonstrated.

Part II, Special Pathology, occupies 630 pages, divided into 17 chapters. Chapter IV is an instructive discussion of the Thymus Body. While Thymic hypertrophy is rare, we are advised that, "Very often this persistence or enlargement of the Thymus is present without any associated phenomena."

The excellence of the illustrations and elegance of diction make this book delightfully readable. C. W. D.

MANUAL OF OPERATIVE SURGERY. By John Fairbairn Binnie, A.M., C.M. (Aberdeen), Surgeon to the General Hospital, Kansas City, Mo., Fellow of the American Surgical Association, etc. Fifth Edition, Revised and Enlarged. With 1365 Illustrations, a Number of Which Are Printed in Colors. Philadelphia: P. Blakiston's Son & Co., 1911. Pp. x-1153. (Price, \$7.)

The present edition—the fifth—of Binnie's Manual of Surgery appears in one volume. The book has been brought up to date. It comprises six parts. The 6th part under the heading of Unclassified Topics contains such subjects as abscess, drainage, the nerves, sutures, vascular system, operations on bones and joints, amputations, flat foot, tenotorrhaphy, tenotomy, and Dupuytren's contracture. Part I takes up operation of head and neck; part II, of the thorax; Part III, of the abdomen; part IV, of the genito-urinary system; and Part V, of the spine. The chapter on The Pancreas is particularly lucid, both in illustrations and text.

Bacterial Vaccines, Tuberculins and Serums, Parke, Davis & Co., Detroit, Mich., is one of those very useful booklets sometimes sent out by manufacturing chemists. The book opens with these statements: Bacterial Vaccines or Bacterins are suspensions, in physiologic

salt solution, of pathogenic bacteria whose vitality has been destroyed by heat. Serums are the liquid portion or serum of the blood of animals, usually horses, that have been treated with gradually increased doses of bacterial toxins or attenuated or killed cultures of the organisms themselves. Toxins are the

products of bacterial (pathogenic) growth.

Modern Diagnostic Methods, a little booklet issued by the Fellows Co., New York, is crowded with valuable data. Such advertising is commendable. A postal will bring you a copy.

MISCELLANEOUS

THE LLOYD GEORGE INSURANCE BILL.

The British Parliament has adjourned for the year, having accomplished in its two unusually long sessions two great achievements. At the spring session the Parliament Bill, destroying the veto power of the House of Lords, was enacted; at the autumn session, just closed, Mr. Lloyd George's Insurance Bill was made law. The Insurance Bill is a gigantic measure of social reform. It is estimated that it will affect fifteen millions of workers. The principle of the bill is the insurance of working men and women against the loss and suffering which come from sickness and disability. The plan involves a tremendous number of details, and many exceptions to and modifications of its general rules; but in the simplest cases, which will doubtless include very much the largest proportion of the cases under the bill, the procedure will be as follows: The worker will be obliged to contribute to the insurance fund eight cents a week (six cents in the case of a woman), which will be deducted from his wages; the employer will be obliged to contribute six cents a week to the fund for each employee. To these contributions will be added by the government a sufficient amount to make up two-ninths of the benefits subsequently paid in the case of men, and one-fourth of the benefits in the case of women. The worker will thereupon be entitled to certain regular

benefits in case of sickness—free medical treatment; free treatment in a sanitarium if necessary; a payment of two and a half dollars a week (one dollar and eighty-seven cents in the case of a woman) for a period not exceeding twenty-six weeks from the fourth day of sickness; a payment, in case of subsequent disablement, amounting to one dollar and a quarter a week from the time of the termination of the sick benefit and, in the case of a woman who is either insured herself or is the wife of an insured man, a maternity benefit of seven dollars and a half. The collection of the contributions and the distribution of the benefits will be made through approved benefit societies and trades unions, in the case of those workers who are members of such bodies. In the case of others the contributions will be collected through the postoffice, and the benefits distributed through local health committees to be organized for the purpose. These health committees will have other functions, such as investigating and reporting upon health conditions in their districts. A remarkable minor provision of the bill is that where excessive sickness in a locality is found to be due to the fault of some person, a claim may be made against such person for the extra expenditure incurred by reason of the sickness. A landlord, therefore, who shall permit his tenements to get into such a condition that they cause excessive sickness will be compelled to

pay for his negligence. Contributions on the part of the workers will be compulsory in the case of all persons under contract of service, with the exception of a few specified classes who work under exceptional conditions. When the bill was first introduced by Mr. Lloyd George, its underlying principle received the approval of all political parties, and of practically all classes in the community. In its progress through Parliament, however, opposition to its details arose—partly partisan, partly selfish, and partly, doubtless, sincere. It has been asserted that the rapidity with which this complicated measure was put through the House of Commons by an autocratic majority made it impossible for the details of the bill to be properly considered and satisfactorily worked out. The progress of the Insurance Bill has aroused anew bitter criticism of those peculiarly drastic forms of closure, the “guillotine” and the “kangaroo closure,” which British Governments have found it necessary to invent and adopt in order to get through with the tremendous amount of public business which confronts the House of Commons at each session. It is to be observed, however, that the criticisms of these methods come, as usual, from the Opposition, and that they have not been accompanied by any constructive suggestion for the reconciliation of the necessity of getting things done in Parliament with the desirability of permitting untrammelled debate.—*The Outlook*.

Those of us who have attended the sessions of the British Medical Association have always been impressed by the dignity, the almost austerity, of English medical men.

Their one thought has appeared to be the maintenance of “good form.” It is, therefore, difficult to credit the reports in the newspapers of the actions of 2,000 British physicians, who met in Queen’s Hall, London, just before Christ-

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mas to consider the medical attitude toward the National Insurance Act.

It is incredible that the terms, “rowdy,” “hoodlum,” and similar opprobrious epithets could rightfully be applied to any English physician, but if some of the more conservative papers are to be believed, the conduct of the attendants at the meeting justified the appellations.

Sir Victor Horsley, whom American medical men hold in such high respect, is said to have been hooted and hissed and greeted with cries of “Swank” and “Traitor.” Just what a “swank” may be we have no knowledge, but being coupled with “traitor” is significant that it is hardly a term of commendation. Although desiring to speak as a member of the Council of the British Medical Association, Sir Victor was unable to

make himself heard in the five minutes allotted to him and another member of the Council. Dr. Keay, was no more successful.

A well known journalist, Harold Spender, thus describes the meeting:

"I have seen many a feverish meeting—strike meetings, war meetings, publicans' meetings. But never, perhaps, have I seen a more complete absence of the sense of justice or fair play than among these doctors. A meeting of workmen will almost always respond immediately to the call for fair play. This meeting only yelled the more loudly. Their treatment of their own fellow-professionals was astounding, incredible." Another observer describes how middle-aged men sprang from their seats yelling and brandishing umbrellas to the imminent danger of their neighbors, and sums up by declaring that it was a scene of violence, abuse and disorder that would have discredited a gathering of dockers on Tower Hill.

It is scarcely necessary to concern ourselves with the merits or demerits of this bill. It would seem, however, to meet the desires of the majority, in that it

passed the House of Commons by a vote of 320 to 21 and passed the House of Lords without a single vote in opposition.

The Council of the British Medical Association also favors the adoption of the bill, which intimately affects medical practitioners, so it is difficult to see why the opponents to the act should be so vociferous in their denunciation.

Certain it is, the conduct of the physicians in attendance at the Queen's Hall meeting has brought discredit upon the entire body of medical men in Great Britain and we truly hope the British Medical Association may take such action as to remove the stigma so unfortunately placed upon the escutcheon of English medicine.—*The Medical Times*.

(Editorial Note.—The medical profession of America should sit up and take notice. There will be a national health insurance bill passed in this country in the near future. Will broad minded, altruistic physicians prepare and press through a bill that will do justice to all or shall it be left to some American Lloyd George, who with the noblest of intentions may commit some technical error?)

CALIFORNIA HOSPITAL ALUMNAE NOTES

Miss Edith Thomas, Class of '04, and superintendent of the hospital in Morencí, Arizona, has been given a six months' leave of absence, and is visiting all of the principal Eastern cities. She spent a few days with Miss Lampman, former superintendent of the California Hospital, at her home in Elmira, N. Y. On her way home she will visit Mrs. Wardell in Spokane.

Mr. and Mrs. Dan Smith, of Spokane, were made happy by the arrival of a small daughter December 30th. Mrs. Smith was Miss Hazel Storey, Class of '04.

Mrs. McCulloch, nee Todd, '04, of Oakland, is visiting the Southland. She

spent some time with Miss Corbett at her home in San Bernardino.

Miss Gage, who has been very ill for a long time, is reported as being much better.

The members of the Board of Directors of the California Hospital gave the pupil nurses a most excellent Christmas gift this year: a most beautifully laid out tennis court with everything complete for playing, and now as we pass on the cars each day we see blue and white-clad maidens filling their lungs with pure oxygen in their hours off duty. Surely this was a most thoughtful and lovely present for the whole school.

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The engagement is announced of Miss Hersey, Class of '05, to Mr. Evans, of Canada. The ceremony will probably take place in March. Their future home will be in this city.

Miss Eva Reinhart, Class of '10, will leave here about the middle of February to make her home with her sister in Modesto, Cal.

Miss Ava Anderson, Class of '11, has accepted a position in the office of Dr. E. R. Smith.

Joseph Moriel, a wee stranger, arrived at the home of his parents in Ensenada, Lower California, on December 30th. Mrs. Moriel was Miss Lickert, Class of '09.

The nurses of the California Hospital Alumnae Association have been working upon plans for a sick benefit fund

for a long time. Finally with the co-operation of the members of the Hospital Board and others interested in this cause, they have perfected a plan whereby the members may be cared for during illness free of charge. The members wish to thank the Board most heartily for their share in this good work.

Mrs. Wardell, nee Ruth Arnold, of Spokane, is planning a visit with her sister in this city soon.

Miss McConnell is in this city with her sister, who has been quite ill.

Mrs. Mercer, nee Margaret Martin, Class of '03, of South Dakota, has just passed through an operation in a Chicago hospital. We wish her a speedy recovery.

Mrs. Ensign and Miss Dougherty

write that they are enjoying their work in the United Verde Hospital at Jerome, Arizona, very much.

A long-talked-of Superintendent's Society was organized last Tuesday in this city, with Miss Pickhart, of the Pasadena Hospital as president; Miss Ward, of the Pacific, vice-president, and Miss Eva V. Johnson, secretary.

BEE STINGS DISCREDITED.*

The treatment of chronic articular rheumatism by means of bee stings, recently highly praised, would appear to have suffered a reverse. The therapeutical pendulum is swinging back nihilistically. T. Duncan Newbigging, a Scotch physician, reports in the Practitioner for January, 1912, that he believes the bee sting method to be nothing short of mere humbug. He has tried is repeatedly—on himself. He owns to the fact of being an extensive bee keeper, and is frequently stung, "sometimes to a degree that is alarming." Fifty stings a day would not inconvenience him, yet he suffers severely from articular rheumatism. This is not because he counteracts the effect of the stings by his mode of life, which is of the simplest. As a consolation for the failure of the bee method he contents himself with frequent sponging of the whole body, except the face, with dilute acetic acid, a less heroic procedure and one, judging by the relief obtained, far more efficacious.—*Boston Medical and Surgical Journal*.

*See Southern California Practitioner, October, 1910.

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AN INSANE CLASSIC.

A penniless lawyer of Chicago, hopelessly insane, who was an inmate of the hospital at Dunning, died a few years since, leaving nothing but the following prose poem, in the form of a will. It will outlive many a learned treatise destitute of imagination, fancy or sentiment; and even many a bit of verse illuminated by the glow of true poetic feeling. Incidentally it illustrates the kinship which often subsists between talent and mental observation, and may serve and correct certain current misconceptions with deference to the nature of insanity.

I, Charles Lounsberry, being of sound and disposing mind and memory, do hereby make and publish this, my last will and testament, in order, as justly as may be, to distribute my interest in the world among succeeding men.

That part of my interest, which is known in law and recognized in the sheep bound volumes as my property, being inconsiderable and of none account, I make no disposition of in this my will. My right to live, being but a life estate, is not at my disposal, but these things excepted, all else in the world I now proceed to devise and bequeath.

Item: I give to good fathers and mothers in trust for their children, all good little words of praise and encouragement, and all quaint pet names and endearments, and I charge said parents to use them justly, but generously, as the needs of their children shall require.

Item: I leave to the children exclusively, but only for the term of their childhood, all and every, the flowers of the fields, and the blossoms of the woods, with the right to play among them freely according to the customs of children, warning them at the same time against thistles and thorns. And I devise to children the banks of the brooks and the golden sands beneath the waters thereof, and the odors of the willows that dip therein and the white clouds that float high over the giant trees. And I leave to children the long, long days to be merry in, in a thousand ways, and the night, and the moon, and the train of the milky way to wonder at, but subject, nevertheless, to the rights hereinafter given to lovers.

"while the paramount serviceability of a remedy is its therapeutic value, its adaptability is an item of no small import.

This is particularly true in the application of hot moist heat, the generally accepted treatment for inflammatory conditions, where its continued application is so essential for results.

To subject a patient to frequent and unnecessary dressings and exposure, as is the case where poultices, moist packs, etc., are used, not only retards the progress of treatment, but disturbs and annoys the patient and is not in keeping with advanced therapeutics.

The serviceability of antiphlogistine as a therapeutic agent is best attested by the preference accorded it by the medical profession in the treatment of Congested or Inflammatory conditions where hot moist heat is called for.

The adaptability of antiphlogistine indicates it as the best medium for the employment of hot moist heat, as it is easy to apply, holds its heat for hours and thus does not disturb or annoy the patient."

Item: I devise to boys jointly, all the useful, idle fields and commons, where ball may be played; all pleasant waters where one may swim; all snowclad hills where one may coast; and all streams and ponds where one may fish, or where, when grim winter comes, one may skate, to have and to hold these same for the period of their boyhood. And all meadows, with the clover blossoms and butterflies thereof; the woods with their appurtenances, the squirrels and birds and echoes and strange noises, and all distant places which may be visited, together with the adventures there found. And I give to said boys each his own place at the fire-side at night, with all the pictures that may be seen in the burning wood, to enjoy without let or hindrance, and without any incumbrance of care.

Item: To lovers, I devise their imaginary world with whatever they may need, as the stars of the sky, the red roses by the wall, the bloom of the hawthorne, the sweet strains of music, and aught else they may desire to figure to each other the lastingness and beauty of their love.

Item: To young men, jointly, I devise and bequeath all boisterous, inspiring sports of rivalry, and I give to them the disdain of weakness and undaunted confidence in their own strength. Though they are rude, I leave to them the power to make lasting friendships, and of possessing companions, and to them exclusively, I give all merry songs and brave choruses to sing with lusty voices.

Item: And to those who are no longer children, or youths, or lovers, I leave memory, and I bequeath to them the volumes of the poems of Burns and Shakespeare and of other poets, if there be others, to the end that they may live the old days over again, freely and fully without title or diminution.

Item: To our loved ones with snowy crowns, I bequeath the happiness of old age, the love and gratitude of their children until they fall asleep.

—*The Institution Quarterly* (Illinois.)

Science without conscience is but the ruin of the soul.—Rabelais.

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Annual Banquet American Medical Editors' Association, June 26, 1911. No. 1. Dr. Joseph MacDonald, Jr., of New York City, President. No. 2. James Slauson, President Los Angeles Chamber of Commerce. No. 3. Thomas L. Stedman, New York City, Vice-President, Editor Medical Record. No. 4. Thomas D. Crothers, Hartford, Connecticut.

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DR. GEO. L. COLE, DR. CECIL E. REYNOLDS, DR. F. M. POTTENGER
and DR. WILLIAM A. EDWARDS.

ENTEROPTOSIS AND ALTERED FUNCTION OF THE DIAPHRAGM RESULTING FROM INTRATHORACIC INFLAMMATIONS.*

BY F. M. POTTENGER, A.M., M.D., LL.D., MEDICAL DIRECTOR, POTTENGER
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In order to intelligently comprehend the clinical picture produced by inflammations of the lungs and pleura, particularly those of a chronic nature, it is necessary to have a fairly accurate knowledge of the interrelationship between the thoracic and abdominal cavities and of the anatomy and physiology of the diaphragm and the disturbances in its function which such diseases cause. This is especially true as regards the symptoms relating to the gastro-intestinal tract and those of a cardio-neurotic nature.

Stillier (1) followed by the gastroenterologists and surgeons, has emphasized the *habitus enteropticus*. The high and low position of the diaphragm and the symptoms referable to these conditions have been brought to our attention by Wenekebach (2). Eppinger (3) has given us a most valuable discussion of the diaphragm in its anatomical, physiological and pathological relations;

discussing fully the alteration in its function from both the abdominal and thoracic standpoints. For the most part, however, the etiology of enteroptosis has been discussed from the abdominal point of view. I wish, on the other hand, to emphasize the point which, although known, is often lost sight of, viz: that enteroptosis and the symptom-complex which accompanies it may be of supra as well as infra diaphragmatic origin.

The diaphragm is the chief muscle of respiration. It is maintained in position by the relative pressures of the thoracic and abdominal cavities. When it contracts its arch descends, forcing the abdominal viscera downwards and forwards, increasing the intra-thoracic space from above downward, laterally and antero-posteriorly; and at the same time decreasing the intra-abdominal space. By this same action the intra-thoracic pressure is decreased and the

*Read before the Southern California Medical Society, December 6, 1911.

intra-abdominal pressure increased. The soft portions of the abdominal wall, together with the lower ribs, are forced outward, thus increasing the lateral and antero-posterior diameter of the inferior portions of the thorax and increasing the tension of the abdominal muscles. The attempt to regain equilibrium after this increase in the intra-abdominal pressure and stretching of the abdominal muscles, becomes a positive factor in replacing the diaphragm at the end of inspiration. It can be seen that free motion of the diaphragm, a normal intra-abdominal pressure and strong abdominal muscles are essentials to normal respiration. No less important are these conditions in their bearing upon the physiology of the circulation. During each contraction of the diaphragm, with its enlargement of the lung capacity and reduction of the intra-thoracic pressure, there is not only a suction action which causes the air to rush into the lungs, but also an enlargement of the heart and the production of a suction action which favors the return flow of blood to the right auricle. Aside from this, the return flow of blood from the abdominal veins is also favored by the positive intra-abdominal pressure, caused by contraction of the diaphragm and the stretching of the abdominal muscles, by which the blood is squeezed out of the abdominal organs and pressed on into the right chamber of the heart.

In this connection, I do not wish to appear to ignore the costal type of respiration which is very common, especially in women. In the costal type the action of the diaphragm is less than in the abdominal type, but the intra-abdominal pressure is maintained by other measures, while in the abdominal type the abdominal muscles are pushed outwards as the diaphragm descends, in the costal type the descent of the diaphragm is less marked; yet, while it is

taking place, the abdominal muscles, instead of being pushed outward, are drawn in, thus lessening the intra-abdominal space and increasing the intra-abdominal pressure.

Anything that alters the intra-thoracic or intra-abdominal pressures must necessarily effect the diaphragm to some extent and interfere with the function of the organs lying within these two great cavities.

It is to the disturbances in the function of the diaphragm, due to pathological conditions within the thorax, that I wish especially to call attention.

The usual description of enteroptosis almost wholly ignores intra-thoracic conditions as being etiological factors. Text books on diseases of the stomach and intestines usually ascribe enteroptosis to congenital *habitus enteropticus* (Stiller); relaxation of the abdominal walls following pregnancy or wasting disease; removal of tumors; general malnutrition; absorption of adipose tissue in the abdomen, and faulty dress. In this connection, I wish to emphasize the fact that patients suffering from chronic diseases of the lungs and pleura often suffer from enteroptosis, not only because of wasting or a congenital *habitus enteropticus*, but because of the pathological conditions found above the diaphragm. This is especially true in all those conditions which result in a chronic cough and an emphysematous condition of the lungs. We find this in so-called idiopathic emphysema; also in all compensatory emphysemas, such as those found as a result of asthma, mediastinal tumors or chronic tuberculosis, especially when the active disease has been circumscribed at least for a considerable portion of time. In the latter case, as a result of prolonged coughing, those portions of the lungs which are not affected, usually take upon themselves a chronic emphysema, the lower borders are pushed down and often fill the entire plural space, push-

ing the diaphragm and the underlying abdominal organs before it. The enteroptosis in these cases is favored by the general malnutrition and muscle wasting. In extreme instances we find that the organs subjacent to the diaphragm have fallen away from it and removed from it their fulcrumlike action, with a resulting paradoxical respiration. I have seen enteroptosis follow the emphysema caused by an unusually severe and prolonged attack of whooping cough.

Enteroptosis, either of a temporary or permanent nature, also follows pneumothorax, pleurisy with effusion and empyema. While every organ in the abdomen may be displaced downward, either singly or collectively, and while the symptoms will vary somewhat according to the organ or organs producing them, yet there is a certain chain of symptoms which we have learned to associate with this condition. Such patients appear pale, have a small, rapid pulse, cold extremities, complain of general weakness, lack of endurance, nervous instability, shortness of breath, palpitation, dizziness, poor appetite, digestive disturbances and constipation. While these symptoms are present in enteroptosis, they are also found in another condition which is always present to some extent in diseases of the lungs and pleura. I refer to the diminished function of the diaphragm, which may or may not be associated with enteroptosis. Heretofore, as clinicians, we have not sufficiently recognized the fact that the function of the diaphragm is always interfered with in inflammations of the pleura, lungs and pericardium, neither have we sufficiently appreciated the fact that when its excursion is diminished it is impossible for the circulatory, respiratory, and digestive systems to functionate normally, and that resulting from this altered function there is general nervous instability (4). The diaphragm is af-

fected in many different ways as a result of intra-thoracic inflammations. Its excursion may be limited on one or both sides. It likewise may be increased on one or both sides; one side may be limited and one side increased; one or both sides may assume a high position in the thorax, and one or both sides may assume a low position. But, no matter what change is made in its position, its normal function is interfered with and this in turn reacts upon the respiratory, circulatory, digestive and nervous systems.

From its intimate connection with the diaphragm, it is self-evident that there cannot be a displacement of the diaphragm without a displacement of the heart. I have previously described the manner in which the heart and diaphragm are displaced in tuberculosis (4), and while I do not wish to enter into a full discussion of this again at this time, yet I will quote from my former paper the manner in which the heart is drawn upwards, or forced downwards, or drawn to one or the other side as a result of changes within the lungs, and the effect of this change in position upon the circulation.

"The effect resulting from destruction of tissue and contraction of the upper lobe of the left lung is to draw the heart upwards and to the left. Not only is the heart thrown out of its normal position and forced to work at a disadvantage because of this, but the probabilities are that the outlines of the pericardium are changed so that the pericardial space is somewhat reduced. This altered position causes the heart to drag on the large vessels and produces a decrease in the curve of the arch of the aorta, thus bringing about a condition which interferes with the free flow of blood into the systemic arteries. The same dragging effect is exerted on the other vessels pulling the pulmonary arteries and the large veins out of their normal course

and interfering with the outflow of blood from the right ventricle and the return flow of blood to the right auricle.

"If the destruction of tissue and contraction occurs in the upper lobe of the right lung, the heart is drawn upward and to the right. The curve in the arch of the aorta is increased and pouching is favored. The heart is again thrown out of its normal position and the venae cavae and other intra-thoracic vessels are drawn from their regular course; and, again, obstacles to filling and emptying the heart are encountered.

"If the heart hangs low in the chest, it increases the distance from the apex to the large vessels, and thus the heart drags upon them, producing disturbances in its function.

"If the heart is displaced directly upwards, the result is a shortening of the distance between the apex and the large vessels which tends to produce pouching of the aorta. This is apt to occur when both apices are the seat of destructive change followed by contraction; this, however, rarely occurs.

"In order to overcome the extra pressure in the circulation in the pulmonary system, the right heart has already hypertrophied and now the left ventricle is compelled to hypertrophy in order to overcome the extra burden thrown upon it by the heart's displacement and the changes in the aorta and general arterial system. In this connection, I would like to call attention to the changes which occur throughout the arterial system as a result of the toxins in tuberculosis. I have elsewhere (5) reported the results of examination of one hundred and sixty-two tuberculous patients. Of these, the arteries were palpable in ninety-four instances. Of ninety-three of these who gave a history of illness lasting more than two years, the radials were palpable in sixty instances. From my study I drew the conclusion

that a thickening of the arteries takes place in chronic tuberculosis as a result of the prolonged action of the toxins. Since writing this paper I have made further observations which fully substantiate the results there reported. A short time ago a young girl came under my care who had been suffering from pulmonary tuberculosis for two years. The disease had not taken a very active form, although percussion dullness and physical signs extended to the third rib on the right. Although she was only eleven years old her radials were distinctly palpable. When we consider the changes which I have mentioned in the aorta, the thickening of the peripheral arteries, the displacements of the heart which cause it to work at a disadvantage, and the fact that the heart muscle early undergoes pathological change, we can see that the end result must of necessity be degeneration."

The disturbance on the part of the diaphragm is of two sources, direct and reflex. When there is an inflammation of the lungs or pleura at the base, or a pericarditis, the diaphragm is probably affected by direct extension. We must assume, however, that there is also a reflex cause operating at the same time. In instances where the interference is not due to a contiguous inflammation, however, but to one remote, such as we note when the motion of the diaphragm is limited as a result of an apical tuberculosis, the cause is clearly reflex.

I look upon this limited excursion of the diaphragm as having the same etiology as contraction of the abdominal muscles in the presence of appendicitis, cholelithiasis, gastric or duodenal ulcer or peritonitis; which is usually described as nature's method of protecting the injured part. It is the same also that I have described in numerous papers as affecting the neck and chest

muscles when the intra-thoracic organs are inflamed. (6).

Williams (7) pointed out in 1897 that the excursion of the diaphragm is limited on the side which is affected by an early apical tuberculosis. While confirmed by others, yet the explanation of it has not been clear until my recent clinical observations were made, which show that muscles which take their nerve supply from the cervical portion of the cord are reflexly influenced by intra-thoracic inflammations, the portion of muscle, the muscle, or group of muscles involved, depending upon the location of the inflammation. I should add here that the muscles show spasm during the presence of acute inflammation, and degeneration when the inflammation becomes chronic, but would refer those interested to my former papers (6 a-g) and to my more complete description in Brauer's *Beitrage zur Tuberkulose* (6-g).

De la Camp and Mohr (8) suggested that William's sign was due to the phrenic nerve being bound down in apical pleural adhesions. Hofbauer and Holzknecht (9) suggested that it was due to decreased elasticity in that portion of the lung which is involved in the tuberculous process and a relaxation of the remaining tissue, causing a general lessening of the contractile power of the lung as a whole. While these explanations seem plausible, yet our anatomical studies show that the phrenic nerve is given off from either the third and fourth or fourth and fifth cervical roots. Clinical observation shows that the superficial muscles which arise from this portion of the cord are thrown into spasm during acute inflammations in the lung, and degenerate, when the inflammation assumes a chronic form. From this it would seem that we are justified in attributing the same conditions to the diaphragm. As Head has shown the existence of the reflexes for the sensory nerves from the

intra-thoracic viscera, so I have shown clinically that there is a motor reflex of the neck and chest muscles. It seems but natural then that the true explanation of the muscle phenomena, as described by me, is analogous to the one offered by Head to explain his sensory phenomena, viz: that the impulse travels from the inflamed lung to the cord and there stimulates the adjacent cells in the segment of the cord which receives the impulse and sends out the reflex impulse through certain fibres of the motor nerves taking their origin in the same segment, thus causing the muscles supplied by these particular fibres (not the entire nerve) to assume a state of spasm. In the case of the diaphragm the efferent nerve is the phrenic. It seems to me most plausible to account for the limited motion of the diaphragm in this way, as being a part of the same protective mechanism that we recognize elsewhere in the body in the presence of inflammation. In the chest this is of special interest because the attempt at mobilization is so complex. The neck muscles, the intercostals and the superficial muscles over the areas of involvement, as well as the diaphragm, are all reflexly thrown into a state of contraction. As a result of this, the motion of the entire side involved is limited. If the clinician will make careful observations, he will be able to detect the limited excursion of the lung on the side involved at the base as well as at the apex, in nearly all instances where active tuberculosis is present, even though the lesion be comparatively small. We cannot believe with de la Camp that apical adhesions involving the phrenic nerve are present in all these cases, nor can we believe with Hofbauer and Holzknecht that it is a matter of relaxation of lung tissue, for we find the same contraction, the same attempt at limiting motion in the muscles of the neck and chest as we do in the dia-

phragm, and it is reasonable to assume a common etiology. My studies and observations along this line are leading me to believe that the limited excursion of the diaphragm is a causative factor in lagging of the apex which we have long recognized as a valuable diagnostic sign in early apical tuberculosis; and careful observations show that the limited motion affects not only the apex, but the entire side.

Whether my explanation of the cause of the limited excursion of the diaphragm is correct or not, it is a condition of considerable clinical importance in diseases of the chest, because it would seem that it is a condition which is rarely if ever wholly overcome. In the chest and neck muscles, where the disease becomes chronic, the acute spasm passes over into a chronic degeneration, and we assume that the same occurs in the diaphragm. Confirmatory evidence is found clinically, for we find the function of the diaphragm interfered with in all chronic diseases of the lungs and pleura, as well as in those of an acute nature.

In all instances where there is a decrease of lung tissue without compensatory decrease in area of the bony thorax, the diaphragm as a whole or in part assumes a higher position than normal; and likewise in all instances where there is an increase in lung volume or an escape of water or air into the pleura without a corresponding increase in the area of the bony thorax, the diaphragm as a whole or in part assumes a lower position than normal. This short discussion shows that the function of the diaphragm is altered or its position is changed in all cases of inflammations, whether acute or chronic, which involve the lung, pleura or pericardium. Therefore, it is necessary for the clinician to have in mind the symptom-complex caused by this condition in order that he may be able to properly interpret his observations.

Many of the symptoms are of a cardio-neurotic nature, and unless the clinician bears this in mind he will at times err in thinking the patient has a serious heart affection.

One of the results of insufficient action of the diaphragm, as previously shown, is the storing up of large quantities of blood in the venous system, especially the splanchnic veins. As a result of this the arterial and venous balance is destroyed and there is a resultant arterial anaemia. This furnishes an explanation of the clinical observation that patients suffering from tuberculosis look pale, while blood tests show a high percentage of red corpuscles. Their paleness is due to the relative arterial anaemia. The relative small amount of blood in the arteries also affords another explanation of hypotension in tuberculosis. Again, it furnishes the conditions which make digestive disturbances common and difficult to handle, viz: a constant venous congestion of the abdominal viscera. Indigestion, enteritis, colitis, constipation and flatulence are found in some degree in practically every case of tuberculosis that has extended beyond the early stage. The chronic congestion present not only favors such conditions but also makes them very difficult to treat successfully. These have been almost wholly attributed to the toxemia and general run-down condition in the past, but I feel that the splanchnic congestion is also a very important factor; for, when such conditions are treated by the proper application of adhesive straps to the abdomen, or when an abdominal binder is properly adjusted the symptoms usually improve. I have seen many of the common stubborn gastro-intestinal symptoms disappear under such treatment and have frequently seen patients who were having three or four loose movements of the bowels a day, and who did not yield to ordinary treatment,

improve when an abdominal binder had been properly adjusted. So have I seen the cardio-neurotic symptoms mentioned above improve under the same line of treatment.

That the beneficial effects of the abdominal binder are not wholly due to its ability to restore and maintain in position the prolapsed abdominal organ or organs must seem clear to anyone who has had opportunity to observe its action. It seems more likely that its beneficial effect is due to its action in increasing the intra-abdominal pressure thus restoring the natural conditions for the proper functioning of the intra-abdominal organs, and at the same time furnishing the power necessary to replace the diaphragm at the end of inspiration, thus insuring a fuller and freer respiratory movement than could otherwise occur.

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THE SYMPTOMS AND DIAGNOSIS OF TUBAL PREGNANCY.*

BY H. A. JOHNSTON, M.D., ANAHEIM, CAL.

Since the great majority of these cases present themselves first to the general or family physician, it is of the utmost importance that he should be familiar with the symptomatology and diagnosis in order that no delay may occur in providing the proper treatment and thereby preserving the life of the patient. No pelvic condition carries with it a higher rate of mor-

talidity and this is chargeable to faulty or late diagnosis, rather than to imperfect surgical technique. In most instances the patient herself is to blame because she has believed the symptoms from which she was suffering in the period before rupture to be merely incident to normal pregnancy.

While but few patients exhibit all the cardinal symptoms, many present

*Read before the Southern California Medical Society, San Diego, December 6, 1911.

enough of them to be of diagnostic value prior to rupture of the tube. Added to the usual symptoms of pregnancy they invariably have pain. This is frequently remittent, lancinating in character, and resembling somewhat the pains of normal labor, usually affecting one side of the lower abdomen, which becomes quite sensitive to pressure. The patient frequently becomes quite faint during the attack of pain. In 75 per cent. of the cases there is a bloody discharge from the uterus. It is usually associated with the pain and the expulsion of the decidua. These two—pain and bloody discharge—are the two most constant early symptoms and any patient coming to her physician with a history of having passed one or two menstrual periods and presenting one or both of the above symptoms should be thoroughly examined, preferably under general anaesthesia, in order to determine the existence of any physical signs that might exist.

In a typical case one will find upon examination a softened cervix, enlarged uterus sometimes displaced to the opposite side. The affected tube is thickened, tender with arterial pulsations more marked than in the other one. If upon careful and necessarily gentle vaginal and rectal examination the attending physician is not positive of the absence of tubal pregnancy, he should immediately call to his assistance competent aid. For since diagnosis before rupture is usually difficult and the symptoms and signs obscure, the mere fact of his having a suspicion should be sufficient reason for any physician to enlist the aid of one or more competent consultants. The risks attendant upon an exploratory laparotomy are trivial when compared with those usually following rupture.

Following rupture of the tube a vastly different picture usually presents itself to the physician. The sudden, lancinating, abdominal pain is fol-

lowed by collapse. All the symptoms of shock and concealed hemorrhage are added to the scene. The outcome now depends upon the severity and continuance of the symptoms. Some die at once; others linger along a few hours, at no time in a condition when operation is safe or justifiable; others gradually recover from the shock and being operated upon later pass on to recovery, and yet others have symptoms so mild that there is no shock, and recovery takes place through the natural means of absorption, or the foetus still lives to make more trouble at a future date. Upon vaginal and rectal examination we discover usually a hematoma or hematocele depending, of course, upon whether rupture has taken place into the folds of the broad ligament or not. We may consider ourselves fortunate indeed if our patient survives the hemorrhage and shock long enough for successful laparotomy, which in the majority of cases is our only hope.

In an effort to determine how many cases had occurred in Orange County—with an average population of at least thirty thousand—during the past decade I addressed a circular letter last month to the physicians, some thirty in number, calling for reports of cases, especially as to diagnosis and symptoms, and giving each an outline as to what data I desired. Replies came from almost every one, the great majority expressing their joy that they had never to their knowledge had a case of this sort. Two reported cases where the diagnosis had been made but operation refused in one instance and not advised in the other, both patients having recovered.

I have omitted all from my report but the operated cases which are seven in number, three of which occurred under my own observation.

REPORT OF CASES.

I. Reported by Dr. Wehrley, Santa Ana: Multipara, age 35. No pelvic

history. Five children died at ages of from 1 to 8 years. Only one child living. First examination before rupture of tube. Symptoms pain in appendical region and vomiting, no bloody discharge. Condition suspected before but diagnosis made after rupture. Operation and recovery.

II. Reported by Dr. Waffle, Santa Ana: Multipara, age 38. No pelvic history. First examination made in fifteenth week at which time decidua was expelled, rupture having taken place during previous week. Symptoms were intense pain on right side with high temperature. Operation by Dr. Ball in sixteenth week. Recovery.

III. Reported by Dr. Ball, Santa Ana: Mrs. A. M., age 34. Multipara. No pelvic history. No symptoms before rupture except nausea. Menses regular to the day. Rupture took place in twelfth week. Extreme shock. First examination and diagnosis made after rupture. Laparotomy. Right tube ligated. Death from shock and hemorrhage shortly after removal from table.

IV. Reported by Dr. Burlew, Santa Ana: Mrs. L., 30. One child 8 years old. No pelvic history. Last menses Jan. 4, 1911. At 4 a.m., March 12th, seized with radiating abdominal pain not localized. Had done some vomiting. Passed small blood clot which had not been preserved (possibly the decidua). Pulse normal. No faintness or sweating. Abdomen tender everywhere. Vaginal examination revealed boggy uterus, patulent os and extreme tenderness. Pain continued three or four days. Subsequent to passage of "clot" there was no more hemorrhage. Husband reported from time to time the usual symptoms of normal pregnancy up to the eighth month, patient being sure she felt life at fifth month. Urinalysis at eighth month showed considerable albumen. Being overdue and believing the foetus to be dead, she was brought to the hos-

pital in tenth month and artificial labor induced. It was soon discovered that the uterus was but four inches deep and empty. Laparotomy with median incision was performed and a ten-pound full term girl removed. It had been dead probably ten days. Sack and membrane were sutured to incision and cavity packed. Packing removed gradually for first two days. Gradually placenta and membranes have sloughed out and recovery is assured. The sac was composed of a greatly expanded left broad ligament with placenta attached to the tube. Peculiarities of the case are: (a) Absence of bloody discharge from the uterus, (b) Slight shock at rupture, (c) Development to full term.

V. Mrs. F. S., age 35.—Multipara. Two children. Youngest 8 years. First examination made at eighth week. Patient had just passed complete decidua. Had bloody discharge and pain for four days previous. Left tube swollen, pulsating, tender, uterus enlarged. Cervix softened. Made diagnosis at once. Tube removed next day, ruptured during removal. Recovery.

VI. Mrs. B., age 31.—Multipara. History of pelvic disease. First examination after rupture. Pain in median line. Slight shock. Bloody discharge for several days containing pieces of decidua. Vaginal examination revealed a mass in region of right tube. Laparotomy showed that the mass felt was some old pelvic adhesions and that the left tube was the pregnant one. Rupture had taken place gradually, the placenta plugged the laceration and there was not more than a pint of blood in the abdominal cavity. The left ovary was prolapsed into the culdesac which may have accounted partly for our imperfect diagnosis. Recovery.

VII. Mrs. J. K., age 29.—Nullipara. Tubercular history. Emaciated. Married but a few months. Seen first at tenth week. Patient complained of

radiating pains in abdomen. Insisted that it was fecal obstruction of bowels from which she had frequently complained before. Being a graduate nurse this diagnosis of her own was given some weight. Cathartics, high enemas, etc., were administered but of no avail. Careful examination of pelvic region revealed what we thought to be a normal pregnancy. No anaesthetic was given. Pain continued to get worse until shock and collapse were added to our difficulties. Another vaginal examination revealed nothing. In the hands of a competent consultant the diagnosis of obstruction was affirmed, after considering tubal rupture as a possibility on account of the collapse of the patient. In a few hours we called a third consultant who diagnosed concealed hemorrhage from

probable rupture of tubal pregnancy, basing his diagnosis on the history and the collapse. Stimulants in large quantities were used, laparotomy performed and right tubal pregnancy with large hemorrhage found. The pregnancy was interstitial involving the part of tube which enters the uterine walls. No bloody discharge occurred at any time. Patient died half hour after operation.

Very important then is diagnosis before rupture, and the physician who has detected the existence of tubal pregnancy before rupture has done as much if not more toward the safeguarding of his patient's life than has been done by the surgeon who removes the offending part—not wishing to minimize in the least the work of the latter but rather to emphasize the great value of early diagnosis.

PHYSICAL EXAMINATION OF SCHOOL CHILDREN WITH SPECIAL REFERENCE TO THE EFFECT OF EXERCISE ON THE HEART.*

EVERETT C. BEACH, A.B., M.D., LOS ANGELES.

It is not my purpose in this brief paper to discuss at length the organization of departments of medical inspection in public schools, but merely to mention one or two of the most important duties of the physical examiner, through a misconception of which these departments are placed in the wrong light before the public, and bringing criticism from the home and the profession.

As with many of the most valuable contributions to modern civilization we turn to Ancient Greece and Rome for the origin of physical examinations. The artists and sculptors of the ancients studied the human form that they might simulate its beauty and grace in their productions. The suc-

cessful athlete of the Olympic games had as his reward his statue carved in marble and the laws of the proportion gradually evolved through a study of these accepted standards.

During the middle of the last century the uplift given to the natural sciences led to a more careful investigation of human forms, and it was noted that the size and relation of the parts had an important bearing upon the efficiency of the human machine.

In more recent years the incentive for the examinations has been for physiological, psychological and hygienic aims, and, during the last 25 years, many educational institutions have been conducting physical examinations for educational purposes.

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The examinations have been conducted for the most part by the Departments of Education and the Departments of Physical Education.

These examinations were conducted primarily for the purpose of determining the normal rate of growth of the human child and the relative rate of growth of the various parts, together with a study of the factors regulating the rate of growth. Standards of the normal child were thus established. It was noted that there were instances in which the measurement varies too widely from the standards. These were studied with a view of determining the causes of the variations and methods of restoring them to the normal.

While the establishment of medical inspection of schools dates back as far as 1833 in Germany, there was no effort made by this department to give physical examinations until about 1889. The duties of this department were mainly the inspection of sanitary conditions and the detection of contagious disease.

The great value of the physical examination lies in determining the effect of the variations upon the physical, mental and social development of the child.

The detection of the physical defects and its correction, although essential, does not constitute the most important part of the examiner's work. It is his duty to study individual cases and determine to what extent the physical, mental and social development has been affected by reason of the defect.

The extent to which physical examinations are permissible in the public schools by Boards of Education is dependent upon the extent to which the information, so gained, is directly and indirectly applied to the educative process. The problem of the Physical Examiner is educational, not medical.

The accumulation of statistics and

the satisfying of scientific curiosity is to be discouraged. The belief prevalent among many school examiners that their main duty lies in correcting physical defects is to be regretted. The finding and the removal of the defect are medical matters and do not by themselves properly belong to the duties of the Boards of Education. A physical defect may be quite pronounced, yet not interfere with the normal progress of the child's development. It is only where the defect does interfere with this development, or where the child becomes a menace to the well-being of his associates, that it becomes the duty of the Board of Education to see that the defect is removed. It matters not to them, however, by what method this is accomplished. It is their duty to insist that the child be presented to the school in a condition to derive the greatest benefit from the instruction to which it is to be subjected.

Further, it is the duty of the Boards of Education to utilize all knowledge at their disposal in the application of their instruction and in developing efficient human beings. Medical knowledge, not only of one school, but of all schools, if it be of such a nature as to assist them in gaining their end, should be theirs to use. The next important thing to determine is what shall become of the information gained by the physical examination. The adage, "Knowledge belongs to the one who can use it," is still true and this information can be used by all under whom the child may come for instruction or guidance. The teacher, the playleader, the parents, the family physician, and the child itself.

It is the duty of the Physical Examiner to present the information to these various forces in a form that it may be utilized, in other words, in instances in which defects occur they should be informed as to its nature and its effect

upon the physical, the mental and social development, and also in the best methods of overcoming these defects.

Informed along these lines the teacher becomes more watchful and sympathetic and will give more individual attention. The parents are usually eager for assistance and can do much by daily attention to bring the child back to normal conditions and re-actions.

The family physician with the support of the school examiner can oftentimes secure results in the home which would otherwise be impossible. The child should know his shortcomings and wherein he differs from other children that he may, himself, help in the process of reorganization.

Through the co-operation of all these forces each working toward the same end, results are bound to be accomplished.

SPECIAL REFERENCE TO THE EFFECT OF PHYSICAL EXERCISE ON THE HEART.

In the second part of this paper your attention is directed to the effect of the organized progressive exercise on forty-four heart cases, all of which belonged to that class in which no demonstrable organic changes were present.

Cases.

As time does not permit a detailed description of each case, they are grouped into twenty-six cases of tachycardia, four paroxysmal tachycardia, nine palpitation, and five alterations in rhythm. All cases were school children between the ages of 14 and 20.

The symptoms associated with each group were for the most part characteristic, only one case of paroxysmal tachycardia deserves special mention. A boy 16 years old, apparently strong and well and accustomed to hunting and tramping: a violent attack of tachycardia could be induced any time by subjecting him to undue excitement, by

examining him physically, or even questioning him closely regarding his physical condition.

During the attack the pulse rate increased from 84 to 140, or 148, and persisted for several minutes. The skin became moist and clammy, respirations were deep and more frequent, fatigue followed the attack.

Exercises.

The exercises prescribed in the above cases were for daily use and were of such a nature as to call for the exercise of the major muscles of the body, such as walking, climbing, running and trunk flexions. In the beginning the exercises were few in number, of short duration, with frequent rests. As the patient became more accustomed to the exercises there was a gradual increase in their rapidity of execution and duration and continued to the point of fatigue. The cases were under observation varying from five months to three years.

Results.

Of the twenty-six cases of tachycardia, twenty-two showed a gradual decrease in the pulse rate during the time they were under observation. Four seemed unaffected by the exercises.

Of the four cases of paroxysmal tachycardia, three showed less frequent attacks and a marked decrease in the severity and duration. The particular case referred to above, at the end of one and one-half years, showed a complete disappearance of the attacks, with a constant regular pulse of 80.

In the nine cases of palpitation, four were unaffected or slightly so. In three the attacks were less frequent and severe; in two the attacks disappeared entirely. In the five cases showing alterations in rhythm, three were apparently unaffected, one disappeared entirely and one became more irregular and intermittent.

Conclusions.

From a study of these cases and effects of exercise upon them, I am led to believe that regular progressive exercise of the fundamental muscles during the period of growth and development

tend to produce a more staple and more thoroughly organized central and sympathetic nervous system, in instances where deviations from the normal, such as these, are present.

Laughlin Building.

THE FEEDING AND THE CARING OF THE INFANTS OF THE POOR.*

P. V. K. JOHNSON, M.D., LOS ANGELES.

I shall confine this paper to the work done at the Selwyn Emmett Graves Dispensary of the Los Angeles Department of Medicine, University of California.

The work of the children's clinic is divided into two divisions, the milk station which takes care of the feeding cases and the clinic for the sick and older children. The work of the milk station is carried on, on the same general lines as the milk stations of the East.

Our aim is to look after the babies, give them proper food and teach the mothers how to look after them, help those mothers who have not sufficient breast milk for their babies, and most important of all, to impress upon the mothers the great necessity of maternal nursing. In other words, we are using prophylactic medicine. By so doing, we help to build up these little ones into strong, healthy children, that they may have a good foundation for the battle of life.

Our work not only takes up the post-natal care of the mother and child but also the pre-natal. The importance of this is readily seen when you bear in mind that a large percentage of the total death rate of a community is made up of the infant mortality, and 25 per cent. of this infant mortality occurs during the first month of life.

In order to look after the pre-natal side of this work, the obstetrical de-

partment is working with us. All pregnant women who come under this department are attended by one of the staff physicians, who is assisted by the Maternity District Nurse and by assigned students.

The future mother is instructed and properly cared for, and thus not only will the child have a better chance to be physically perfect, but also the mother will be better able to nurse her baby, which is the greatest factor in combating infant mortality.

Where the obstetrical department leaves off, the children's department takes up the work through the district nurse. The mother is instructed in the general care and feeding of the child, is regularly visited and urged to bring the baby to the Dispensary periodically, that we may keep it under observation.

At the milk station the history of each baby is carefully gone into, a physical examination is made, and then each infant is put on a formula suited to its individual need. The milk is made up and put into sterile bottles with sterile corks, each bottle holding one feeding and enough bottles are given to last for the next twenty-four hours. The milk is the Arden Dairy Certified Milk, which is delivered fresh every morning, packed in ice. There is no boiling or pasteurizing of the milk.

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We impress upon the mothers the importance of nursing their babies, for we all know that it is the artificially fed baby that is more prone to infantile diseases. If the mother is properly cared for before the birth of the child, 95 per cent. of them would be able to nurse their babies.

Many of these mothers have to work during the day and we supply their infants with modified milk, having the mothers nurse the babies morning and night, for two or three nursings of mother's milk will help a great deal to combat sickness and aid in the child's digestion. All the cases are regularly brought to the Dispensary once a week for examination and weighing.

The milk station nurse devotes her entire time to the work. Besides her duties at the station, where she makes up all the formulas, sterilizes the bottles, etc., she does the follow-up work, which is of the utmost importance and without which the work would be useless. She visits the homes, sees that the doctor's orders are carried out, instructs the mothers in regard to washing the baby, the care of the bottles, looks after the hygienic conditions and makes out a report of the infant's condition. For this she is supplied with printed pads and notes the following:

Is the baby satisfied with its formula?

Does it take it all?

What is the condition of the stool?

Does it vomit?

Has it any colic?

Is its sleep normal or is it restless?

Is it happy or does it cry?

These reports are given to the doctor at the Dispensary so he may be able to intelligently keep track of his patients and regulate the formulas. The babies are at the Dispensary only once a week, so we have to know how the infant is progressing during this interval. If the mothers follow our instructions, we practically have their babies under our continuous observation.

All cases are investigated and we only treat those whose parents are financially unable to employ a physician. Those who can afford to, pay 8 cents a day for the modified milk; but 90 per cent. cannot even do this.

MILK STATION REPORT.

From March 27th to December 1st, 1911:

Number of Infants Registered..	159
Quarts of Certified Milk Used...	2,221
Buttermilk Used	195
Bottles of Modified Milk Distributed	10,399
Quantity of Milk Given to Mothers	319
Number of Nurses' Visits Made to Homes	413
Number of Mothers Treated....	12

At the clinic for the sick and older children we also have a nurse connected with the health department, who at the request of the doctor, visits the cases at home and superintends his instructions.

The worth of the entire work is beginning to show by its results, by the appreciation shown by the parents and by the steady increase in the number of patients.

Wright & Callender Building.

THE PHILIPPINE PROBLEM AS SEEN BY A PHYSICIAN.

BY ISAAC W. BREWER, M.D.

When the United States acquired the Philippine Islands the sanitary condition was very bad, in fact, we might

say that there was an absolute lack of sanitation. Pure drinking water was unknown; most of the towns, including

Manila, were filthy; the disposal of excrement and other refuse was of the crudest and most dangerous method, and in most places no attempt was made to dispose of it. Epidemic diseases, such as smallpox, dysentery and malaria, were rife, and skin diseases and festering sores were seen on all sides.

As soon as a portion of the islands was occupied by our troops, these conditions were remedied as far as possible. The sick were attended by our medical officers, vaccination was begun, and municipal cleanliness was insisted upon. So great was the ignorance about sanitary matters that after twelve years of hard and conscientious work we are only beginning to see the results; and we have no brilliant statistics to show for our labors, as have our countrymen who have worked in Panama and Cuba. However, we have laid a good foundation for better things that will last, and have accomplished something. Although smallpox has not been eradicated, it has been greatly reduced. Cholera is held in check, and the natives are alive to its dangers and have been taught how to prevent it, and it is doubted whether this disease will ever again cause an extensive epidemic throughout the islands. Manila is one of the few large tropical cities that has been able to rid itself of plague. An excellent water supply has been introduced into Manila and the city has been sewered. The town of Cebu is making similar improvements. Artesian water is being provided wherever possible. Hygiene of a practical nature is being taught in all the public schools of the islands, and during the past year a campaign against tuberculosis has been started.

Reliable vital statistics for the entire archipelago are not to be had, but the death rates in Manila are available from the year 1901, and are shown in

the following table, in comparison with the rates for the Canal Zone:

DEATH RATE PER 1000.

Year.	Manila.	Canal Zone, including Panama and
		Colon.
1901.....	38.30
1902.....	59.04
1903.....	40.27
1904.....	46.00
1905.....	39.74	49.94
1906.....	41.07	38.37
1907.....	32.59	33.63
1908.....	47.62	24.83
1909.....	35.50	18.19
1910.....	34.25	21.18

The statistics for Manila, while not showing anything brilliant, do show some improvement, and the reduction will be greater as our facilities for caring for the sick and preventing further infection increase.

The principal causes of death in the city of Manila are shown in the following table, which is derived from the published reports of the Bureau of Health for the five years from 1906 to 1910:

	Number of deaths.	Percentage of all deaths.
Convulsions (under 5 yrs. of age) ..	7,551	18.0
Tuberculosis, all forms	5,998	14.1
Tuberculosis of the lungs	5,124	12.4
Acute bronchitis ..	2,951	7.0
Other epidemic dis- eases (beri-beri)	2,942	7.0
Congenital debility, icterus and scler- ema	2,603	6.2
Simple meningitis	1,968	4.7
Asiatic cholera ...	1,962	4.7
Chronic bronchitis	1,649	3.9
Diarrhoea and en- teritis (2 yrs. and over)	1,503	3.6

Dysentery	1,407	3.3
Diarrhoea and enteritis (under 2 yrs.)	1,222	2.9
Senile debility ...	1,042	2.5
Chronic diarrhoea and enteritis (under 2 yrs.)	979	2.3
Tetanus	830	2.0
Intermittent malarial fever and malarial cachexia ..	572	1.4
Congestion and hemorrhage of the brain	488	1.2
Bright's disease ..	479	1.1
Typhoid fever ...	352	less than 1%
Broncho-pneumonia	315	less than 1%

Total deaths

from all causes. 41,942

According to the table the principal cause of death is convulsions in children under five years of age, but convulsions are a symptom of many diseases, and as a cause of death are no longer accepted by the Bureau of Health.

Tuberculosis, therefore, heads the list, with 5,998 deaths to its credit, or 14.1% of the total mortality. The death rate from this disease is 538 per hundred thousand, which is 3.2 times that of the United States. One-third of the persons who apply to the dispensary of the Philippine Medical School are found to be suffering from tuberculosis.

In the following table is shown the death rate from pulmonary tuberculosis in Manila and certain cities in the United States of about the same population, for the year 1908:

	Death rate per hundred thousand.
Manila, Philippine Islands	486
Indianapolis	184
Louisville	183
Providence	153

New York City, Borough of Queens	125
Saint Paul	88

Not only is the death rate from tuberculosis higher than in the United States, but it is in excess of most of the Spanish-American cities, as will be seen from the following table:

	Death rate per hundred thousand.
Lima, Peru	621
Caracas, Venezuela	621
Manila	538
Rio de Janiero	380
Santiago, Chile	380
Havana	327
Montevideo	160
Buenos Ayres	142
Mexico City	140

The number of sick from tuberculosis in our native troops in the Philippines is nearly twice as great as amongst the native troops of the Indian army.

There is the greatest ignorance regarding the feeding and care of infants and children, and the infant mortality is very high. Cows' milk is not to be had, excepting in very rare instances, and canned milk is the principal food of the children whose mothers cannot nurse them. Dirt and bad food play havoc with them. Albert states that in Manila the deaths amongst children under one year of age is 47.6% of the births. Others have placed the rate much higher than this. In the provinces the rate is not so high, probably because more children are nursed.

Intestinal parasites are very common, especially the round worms and the hook worms, although the latter do not cause such disability as they do in the United States. In certain portions of the islands malarial fever is a scourge and a great hindrance to agricultural development.

The great problem before the people of the Philippine Islands is how to develop the resources so that the Islands

may become prosperous and self-supporting. This problem can only be solved by improving the health of the people. From all sources there is a call for more and better workmen, but they are not forthcoming. Some of the reasons for this are the high infant mortality and the poor health of the people. Men who are infected with tuberculosis, or are the hosts of countless intestinal parasites, to say nothing of other diseases and festering sores, can not be expected to do the best work.

In our endeavors to improve the sanitary conditions in the islands we have been greatly handicapped by the lack of physicians. Excepting in the large towns there are none. A great majority of the people are born, live and die without having the services of a physician, but they consume large quantities of patent medicines. In the Province of Cebu, which has a population of over 600,000, and a density of population of 337 persons to the square mile, there are no physicians excepting in the town of Cebu. In Tayabas Province there are approximately 200,000 persons and but seven physicians.

Recognizing this lack of medical attendance the Insular Government has established a Medical School, which has taken high rank and is graduating some excellent physicians, but the number has been small. Up to 1911, there had been but 11 graduates, while the number of students registered for the medical courses up to July, 1911, including the preparatory school, was but 101. Most of the graduates will settle in Manila, Cebu and Iloilo, or other of larger towns where it will be possible for them to earn a living. In places of twenty thousand inhabitants or less it is doubtful whether a physician could obtain a living, for in such places there is very little money.

There are very few hospitals in the

Philippines. In Manila there are eight, with facilities as follows:

Philippine General Hospital..	500 beds
Saint Paul's Hospital	110 beds
San Juan de Dios Hospital..	300 beds
Mary Johnson Memorial Hospital	50 beds
University Hospital	60 beds
San Juan Tuberculosis Hospital	50 beds
Santiago Cholera Hospital..	50 beds
San Lazaro Hospital	1,000 beds

San Lazaro Hospital is an insane asylum and a hospital for dangerous communicable diseases. The Santiago Cholera Hospital takes only cholera cases. The Mary Johnson Memorial Hospital is exclusively for women and children. The San Juan Tuberculosis Hospital is a sanatorium and does not take advanced cases. The others take all classes of cases excepting communicable diseases. This makes a total of 1,020 beds for a city of over 200,000 inhabitants. Many of the patients in the Manila hospitals come from the surrounding provinces.

Outside of Manila small hospitals are found at Cebu, Iloilo, Butuan, Bagio, and Sibul Springs, and possibly at a few other places. Many of the Army Surgeons have established small clinics near their stations. One of the best of these was a clinic for the treatment of children, established at Zamboanga, by Major Page. The official tour of duty in the Philippines is short and it generally happens that as soon as the originator of a clinic leaves, the work is abandoned.

The Philippines are rich in natural resources, and will one day be a great market for the American manufacturers, but the possibilities of the Islands can not be developed while the people are underfed, and suffer from disease. As a field for medical research they are a gold mine. There is no prejudice against American physicians over there. We need more physicians in the

Islands, and more hospitals in the provinces. There is little money in the Philippines, and for every dollar there are several calls, and the Insular Government can not begin to provide for all the calls they have. Those American citizens who are so anxious to

help the Filipino should consider whether his physical condition is not worthy of as much consideration as his political future. A small hospital can be built for about \$10,000, and the cost of maintenance will be about \$5,000 per year.

ALTITUDES, LATITUDES AND PLATITUDES.

BY E. S. GOODHUE, A.M., M.D., THE DOCTORAGE, HAWAII.

A platitude is defined as a stupid thought, an insipidity; in other words, an assininity.

Some man says an original thing about something or another, whether correct or not, and the rest mouth platitudes about it.

It is just as if they were sitting in front of themselves listening to themselves talk, absolutely without any controlling thought in the matter.

For a long time it was believed that in tuberculosis of the lungs, all a patient had to do was to hurry off to a warm climate.

Nobody had thought enough about it to know, so the platitudinarians echoed the truism, and all the poor invalids in all stages of disease rushed off in indecent haste for California, Florida or Colorado; they went without money, without clothes, without knowledge of the conditions they were going to, or what they should do when they got there; without even good common-sense to guide them along.

You couldn't blame them either when the physician, by whose advice they started out on their perilous journey, showed no better judgment. And when they had scrambled across the continent, crowded and jostled each other out of money and patience; when they were tired and out of breath, with just enough energy to get into another climate, they expected to get better by half-starving themselves, living in small, illy ventilated rooms without warmth and other

comforts; by taking long jaunts across the plains and working harder than they had ever worked at home; by spending their lives in some lonely hamlet thousands of miles away from any one to love or care for them. But they listened to the platitudinarians, and flocked westward and southward, pell-mell, like castaways seeking a House of Refuge.

Here are some of the echoes voiced in a reputable medical journal by a regular physician:

"An altitude of over 6,000 feet will cure all cases of tuberculosis not too far advanced."

"No case of pneumonia will recover at an elevation of over 300 feet."

Then after a decade or so of failures, when the returns began to come in from California and elsewhere, and some thoughtful man here and there raised a warning finger at this wholesale slaughter, the platitudinarians woke up.

Here is one from Vermont: "A patient with tuberculosis will do just as well in the worst climate as in the best if he knows how," and another from Chicago: "With our present knowledge we know that a sanatorium for the tuberculous is just as likely to be therapeutically and climatically adequate in Chicago as one in New Mexico, or the so-called good climates of the world."

And still another cries: "Probably just as large a per cent. of cures of tuberculosis can be made by treatment among the poor in their own quarters as in the best regulated sanatorium."

So the pendulum swings either high or low—sweet chariot carrying unbalanced theories without any regard to equilibrium.

Dr. Isaac Brewer shows us that "Altitude has nothing to do with the mortality of pneumonia. Altitude within the range afforded by the territory of the United States has nothing to do with the mortality."

For a long time a set of platitudinizers have asserted what had been said too often before, that high altitudes increased respiration and the pulse rate to a dangerous degree; that it caused hemorrhage of the lungs.

Well, Dr. Kohn, of Leadville, made a series of observations on the pulse and respiration at an elevation of 10,200 feet, and found that the "pulse and respiration are not accelerated to the extent naturally supposed. It will be observed that at an elevation of 10,000 feet the pulse and respiration compare favorably with the normal at sea level."

"The common fear of hemorrhage from the altitude is, I believe, quite groundless; bleedings are as likely to occur at the sea level as at the mountain top. That is, no relative increase of blood pressure is likely to occur at the seat of lesion because of the altitude," writes Dr. Bridge.

An echo, very persistent, reiterates that the greater mortality of tropical countries is due to heat and humidity.

And everybody remembers that rather witty remark about the rapid degeneration of the church-going New Englander who retires to the tropics to spend his declining years.

The cachexias of malaria, the anemia of uncinariasis, the periodical ravages

of yellow fever were attributed to heat and humidity; but we know better now.

Dr. Howard in his able paper entitled, "Is Mortality Necessarily Higher in the Tropical than in the Temperate Climates?" shows us by asking a question, that this mortality is due to causes which if in operation among the people of colder climates would give us a much higher mortality rate.

Of course, no man can act wisely upon knowledge he does not possess, and our ignorance in some things will continue to abide with us, but plodding honestly along with what fragments of truth we have, is a very different matter from platitudinizing from the house-tops. It is these ceaseless echoes that do the mischief; mere iteration and reiteration of statements which are taken up by persons who do not think enough even to realize what they are saying. That's why we have believed in so much that isn't so for so many hundreds of years, in medicine, religion and science: we simply have been too lazy or indifferent to think the subject over.

I knew an illiterate man who used to come out with "Predeterminism is not adequacy," on state occasions when he wanted to impress his listeners or mystify them with his knowledge.

He had picked up this phrase—perhaps in Mrs. Eddy's waste-basket—and it meant absolutely nothing to him or to anybody else.

Some such reason must actuate those who without knowledge insist upon platitudinizing about latitudes and altitudes, and the never-failing tendency of all tropical climates to bring about physical, mental and moral deterioration in the people who reside in them.

FOR WHOM SHALL THE PHYSICIAN VOTE?*

BY THEODORE G. DAVIS, M.D., LOS ANGELES.

The position taken by our friends, The League for the Protection of Public Health, and my duty as a member of

the Los Angeles County Medical Society leads me to present some thoughts regarding candidates for our votes.

*Delivered before the Los Angeles County Medical Association, December 1, 1911.

They have asked for our suffrages hence we have a right to question their eligibility and fitness.

At our last meeting I could scarcely refrain from calling my friend, Dr. Edwin C. Jones, to order when he spoke of Senator Works as "the Honorable Senator;" neither could I agree with our learned president, "that politics should be kept out of the Association." If the members of the Los Angeles County Medical Association had done a little more politics when Senator Works was nominated they would not be in the position they are today. We should do enough politics to protect ourselves as well as the "dear people."

Prof. Bardeen in a recent address emphasizes the relation of sociological to medical questions. The necessity of training physicians along broad sociological lines in addition to their medical training and the duty of physicians becoming leaders in all matters relating to public health. He also calls attention to an experience in Wisconsin very similar to that presented to us today, where bills relating to school inspection and the teaching of hygiene were defeated by "Christian Scientists" and their allies.

In 1910 I prepared a short article regarding the nomination and election of an individual to the United States Senate, which was not read before this society, I found the association was not ready for it. Neither was it published, for the same reason. The upturned condition in which I find things, upon my return from a vacation, leads me to think you are ready for it—now. I am not acquainted with any of the candidates for whom we are to vote on December 5th, and have no quarrel with any man because of his religious or political faith. I desire also to make it plain that what I say is without personality and is as applicable to one deluded individual as to another. If anyone is specified, it is

because that one has given occasion for specification.

I would have you know that I have taken the time to read Mrs. Eddy's book, Science and Health, with Key to the Scriptures, more than once. While I have read many books of many kinds, this was the most difficult task I ever undertook. The very *disconnectedness* renders it difficult. After you have read it, what have you? A crude disconnected compilation of eastern pantheism, mythical and mystical theosophy, with spiritism, hypnotism and suggestion; which so stultify mentality that its adherents are led to deny the evidence of their senses, even the sense of pain and suffering, as well as the existence of things which the observation of ages and our own experience have led us to regard as right and true. Indeed the first thing a neophyte must do to become a "Christian Scientist" is to abrogate reason and become a liar. (For the truth of this statement I refer you to the published speeches of Senator Works at Washington, at San Francisco, at Chicago and in Los Angeles.) They are told they must not exercise any of the five senses. They may use the senses of sight and of hearing for Mrs. Eddy's book, but for no other purpose. They may not debate or discuss "Christian Science" or they will fall into error and become sick. Can you see how reason is held in abeyance by such threats? If it was not so pitifully purile, it would be amusing to find one-hundred pages (100) in the last edition of Mrs. Eddy's Science and Health occupied with the recital of the cure of diseases which do not exist, except in thought. Having carefully read their publications, associated with and observed their practices and teachings, I cannot but affirm they are based upon falsehood and deception; self-deception, suggestion and auto-suggestion; which as effectually paralyze the mind and moral sense as any narcotic. An Eddyite or "Christian Sci-

entist" is as devoid of the sense of right, in its relation to others, as any opium habitue, or alcoholic addict. They become so befuddled by the incomprehensible that their Ego overshadows the Infinite. This is manifest in their supercilious arrogance; by their hypocritical dissimulation and their shallow mentality. When our present United States Senator was upon the judicial bench he was frequently pointed out as an example of an educated man who had accepted, taught and practiced "Christian Science." I have always contended and still contend, that no one educated in the exact sciences, those which can be proven mathematically, or otherwise, can truly or honestly become a convert to, teach or practice Eddyism. I am willing to admit that a person may have what is called a classical education and become a "Christian Scientist." If he accepts the myths and fables of Greece and Rome as facts, he can become an Eddyite without doubt. But anyone accepting the teachings of Mary Baker Eddy as facts, is laboring under a form of delusional insanity and is not competent to frame new laws or administer those upon the statute books, fairly, justly or honorably. Do you want such persons elected to any office, either administrative or constructive?

The whole tendency of Eddyism is destructive. If as they teach, stultified minds can by concentration affect the minds and bodies of others for good; conversely they can in like manner produce evil effects—the "malicious animal magnetism" of Mary Baker Eddy. A going back, indeed, to the negro fetich of Obi. Looking backward over the history of civilization we see that the acceptance of the teachings of such cults lead to a complaisant contentment with one's self and environment. A condition invariably followed by degeneration, mental, moral and physical. Its engraftment upon a nation means decadence and disintegration. Indeed the greatest

danger in Eddyism is sociological. It strikes at the very foundation of all law—which is the protection of the individual from wrong. As to the League of Medical Freedom, its very apparent and close relation to Eddyism and Charlatanry render the movement suspicious, if not worse. The sentiments vociferously voiced at its recent meeting savor of blatant anarchy and lead me to suggest that at the next meeting the name be changed to The League of Medical Anarchy, which it represents.

Do you want such persons to govern you; to direct the care, the health and education of your children?

Unintentionally I have been obliged to consider the so-called religious side of politics. Of this the *Kansas City Journal* says: "You cannot go more than a quarter of an inch deep in religious politics without striking bottom." That is true at this time, and the bottom is mud, the black, slimy mud of ignorance, superstition and hypocrisy, stirred up in an endeavor to place undesirables in positions of honor and trust.

Why have "Christian Scientists" and like cults made such rapid gain in numbers? My reply is, the birth rate exceeds the death rate. Persons are born without reasoning faculties and the present system of education tends but little to development.

Teachers are paid to do the thinking. Our children too frequently are parrot-like in the acquisition of knowledge. They are not taught to reason or think. Such a parrot makes a good "Christian Scientist."

DISCUSSION.

Dr. Nichols:—I am somewhat surprised at being asked to discuss Dr. Davis's paper. I would have been delighted at the opportunity of reading it before attempting to discuss it. In one way it does not require any discussion; it speaks for itself, it speaks plainly and truthfully. I have mentioned the fact before in this Society, but there may be

some here who have not heard it, so I will say it again, and that is, I was practicing medicine in the town where this affair was started—where Mrs. Eddy was taken up from an hysterical, immoral, erratic condition by this traveling quack practicing the faith cure. I understand that someone has claimed that faith cure had nothing to do with it. I know that that was its foundation. This man was delivering his lectures five evenings a week in Tilton, New Hampshire, and he was lecturing on faith cure four evenings to men and one evening to women. Those who say it did not start as faith cure are liars or don't know what they are talking about. One of the tenets of their religion is lying. Dr. Cabot who investigated five hundred cures by Christian Science found there was not one of them suffering from what he claimed to have been cured of. Those of you who know Dr. Cabot's integrity and his ability as an investigator know that he would not make a statement of that kind unless he was capable of proving it. There are probably a number among you who have had patients who had been told by Christian Scientists that they had nothing wrong with them but thought or error, and on account of not being able to overcome the pain they have come to the operating table suffering with the severest forms of diseases that bring people to the operating table. It is a peculiar study, i. e., the study of the mental make-up of those who have been through experiences with these people, people whom you would naturally think were moral so far as their truthfulness is concerned. For example, I knew a young lady who had an abscess, a large one, who was under the care of a Christian Science healer. She denied that she had pain or suffered at all until one night it was so severe that her sister heard her groaning and then she confessed she was suffering. The next day the abscess was opened and a large amount of pus escaped. She was

so relieved that the day following she was able to go to the healer. She returned and told her friends that she had not had an abscess and that there was no pus, that the pus was only in the mind of the surgeon who lanced it. Now, when anyism will cause people to make such statements as that, what can it be founded upon? That particular cult was the result of an iniquitous alliance between that woman and a shrewd ieinerant quack. She took old Spaulding's writings—those of a spiritualist, and before meeting this man in Tilton she practiced spiritualism herself. I am informed by a man who married Mrs. Eddy's second cousin that she never wrote a word of that book, but after Spaulding died she had those writings in her possession and she turned them over to Fry, who formed a corporation with five directors, and afterward the name was changed from "Faith Cure" to "Christian Science." Now they begin to call it a religion. At first the religious side had very little prominence given to it. At first hardly anything was said about Christian Science as a religion, it was started in opposition to medical men, or medicine. And one of the most prominent characteristics that every individual who has adopted that ism is the faculty of telling untruths about themselves or their friends. Within a month this story was told by the daughter of a woman of my acquaintance, when asked how her mother was, she said that she was in bed suffering and not able to go out, and at that very moment her mother was calling upon a neighbor within two blocks of my house. The young woman who told this story is an intelligent young woman, but she cannot discuss the question of Christian Science with regard to her family without lying. I have waited a great many years for the opportunity of hearing in a medical association a gentleman tell the truth about that fake and this is the first time I have done it since 1872,

and I thank God I have seen this night. The facts put before you by Dr. Davis require no discussion—they are true. I hope to see that paper published. The medical profession has been dozing for forty years. It has not been aware of this destruction of morals. It has not been aware of the destruction of morals—I use the word “morals” because Dr. Kress in his resolutions referred to the mental condition of the school children and the reporter wrote it “morals.” The time has come when we should handle this matter without gloves. The time has come when we should unite. As Dr. Davis says, had the profession been united before the election of Senator Works, that election could have been prevented. When petty jealousy has been wiped out among us, we can go ahead and work together and the people at large will respect us. Whenever we have tried to accomplish anything the reply has always been: “*You* people are not united, what are *we* to do about it?” When a bill was introduced before the Massachusetts Legislature, every quack in the city went before the committee, and when a small committee from the medical profession went to them even the members of that small committee could not agree, and the reply was: “When you can agree upon a bill we will consider it.” That has been the shame of the medical profession for years: that the profession is not united when it goes before the public on any public question. Commercialism, professional jealousy and above all, the man who slanders his neighbor, should be stopped.

Lissner Building.

MEDICAL COLLEGES AND NURSES’ TRAINING SCHOOLS.

At a meeting of the Board of Regents of the University of the State of New York, held at the Education Department in the State Normal College, Albany, Dr. Albert Vander Veer moved

that a school of medicine may be registered as maintaining a proper medical standard and as legally incorporated. It must have apparatus and equipment and resources of \$50,000. It must by October 1, 1912, have at least six full-time, salaried instructors, giving their entire time to medical work, a graded course of four full years of college work in medicine, and must require for admission not less than the usual four years of academic or high school preparation or its equivalent in addition to the pre-academic or grammar school studies.

This motion was seconded and carried unanimously.

Dr. Vander Veer also moved that: For registration, a nurses’ training school must be connected with a hospital (or sanatorium) having not less than 50 beds and a daily average of 30 patients. Each bed must meet the requirements of the State Board of Charities as to air space. The hospital should provide experience in the following departments of nursing: medical, surgical, obstetrical and pediatric. Training schools connected with hospitals not providing adequate opportunities for experience in all of the above departments must become affiliated with institutions approved as giving such experience; and that

All such training schools registered by the Regents of the University shall require of all applicants for admission credentials showing that they have had at least a course of one year in a secondary school (High School) or its equivalent. Evidence of such training in the case of every pupil admitted must be filed with the Education Department as a basis for the recognition of such pupil as a member of the training school.

Duly seconded and carried unanimously.

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EDITORIAL

ANNUAL MEETING ARIZONA MEDICAL ASSOCIATION.

The twenty-first annual meeting of the Arizona Medical Association will be held at Bisbee, May 7th and 8th, 1912. Four sessions will be held (a morning and afternoon session on each day), of which the first three will be for the consideration of purely scientific subjects, while the fourth will be devoted to business matters only. The meetings of the House of Delegates will be arranged so as not to conflict with the general sessions.

A prominent Texas surgeon will deliver the address on Surgery, and one of the best-known California physicians will read the address on Medicine. Fraternal delegates will be present from New Mexico, Colorado, Texas and California.

The members of the Maricopa County Medical Society will take their Balopticon projection apparatus to Bisbee with them, and will illustrate their papers and

any others whose authors wish to use it. This should add considerably to the interest of the meeting.

On the evening of May 7th, the Cochise County Medical Society will take the visiting members and guests by automobile to Douglas for the annual banquet. Later in the evening an opportunity will be given to visit the great Douglas smelters. Wednesday afternoon, parties will be shown the underground workings of the large Bisbee copper mines.

A public meeting will be held in Bisbee on the evening of May 8th, at which one of the most widely-known of the speakers of the Committee on Health and Legislation of the American Medical Association, will deliver an address on Public Health.

As this will be the first session of the Association since Arizona was admitted to statehood, legislative questions of the

greatest importance to the profession will be discussed and decided. These and other matters of intense personal interest to every physician in Arizona make it very desirable that all should make a sincere effort to attend. J. W. F.

Prescott, Ariz., March 1, 1912.

MALARIA IN PANAMA.

Dr. Walter Brem of Los Angeles, formerly with Col. Gorgas on the Isthmus, has written a series of valuable articles on the above subject that are appearing in the Archives of Internal Medicine (A. M. A., Chicago.) This subject is of more and more interest to the profession of California as the completion of the canal approaches. The title of Dr. Brem's paper in the February Archives is: "Studies of Malaria in Panama: The Etiology of the Erythrolytic Hemoglobinuric Type of Blackwater Fever. In a summary at the close of the paper Dr. Brem says:

1. A consideration of pernicious malaria with hemoglobinuria, and the transition cases between it and erythrolytic hemoglobinuria, strongly inclines one to believe that both forms are due directly to an hemolysin produced by the malarial parasite. The estivo-autumnal organism is nearly always the one concerned.

2. The mechanisms of the production of the two types are, it is thought, essentially the same, but differ markedly, as a rule, in degree.

3. The small amount of experimental evidence so far collected tends to confirm the above views.

4. One of two explanations may account for the irregularity and infre-

quency of hemoglobinuria in malarial infections:

- A. Different strains of parasites may generate hemolysin that varies in quantity or intensity with the strain, or with environment that is inimical to the parasites, such as quinin or relative immunity to malaria resulting from previous infections.

- B. An antihemolysin may be formed, as a rule, during the incubation period of malarial infections, when gradually increasing doses of parasitic hemolysin are presumably being liberated. In this case quinin, exhaustion, exposure, etc., may inhibit the production of antihemolysin, especially in debilitated persons who have suffered from previous malaria. In pernicious infections, antihemolysin formation may be good, but the production of hemolysin by enormous numbers of parasites may be sufficient to more than neutralize it.

Note.—Since the above paper was written, Zeiler and I have obtained two more extracts of parasites from the different pernicious malarial infections.

VAN SLYCK OF PASADENA.

The Rose Tree House on Orange Grove avenue, Pasadena, was the scene, on Saturday evening, March 2, where Sincere Good Fellowship warmed the heart of every guest.

The occasion was a complimentary dinner to Dr. D. B. Van Slyck celebrating his eighty-third birthday and his sixtieth anniversary in the practice of medicine.

Dr. C. D. Lockwood was chairman of the Committee of Arrangements and Dr. J. H. McBride was toastmaster. Dr.

McBride enlivened the evening with many witticisms and also delivered the following which he called

HIS PREACHMENT.

It is a beautiful custom that brings us here tonight, that of recognizing in a formal and public way the professional standing and services of an associate. I am sorry it is not more frequently observed, for it is a most agreeable occasion to one who may be the object of the courtesy, and it is also an excellent thing for those who join in it. Like all kindly acts it teaches us to think of others and to be appreciative of our associates; and one of the most difficult things in life is to appreciate the good in others. Appreciation is one of the last things we mortals learn.

It is not saying anything new to say that life is rather a complex affair; and among those things that have taxed the philosophy of the wisest of men is to say in what success in life consists.

The elements of success and the conditions of success are of course various, but there are certain primary, basal qualities that are always necessary to success; they are such as honesty, industry, perseverance and the like. These are homely qualities and we might think in our kindlier moments they were essentially universal; and yet, an inventory of the lives of men would discover that many fairly decent men are lacking in some of them.

Many a man of ordinary talent has made a success of life because he possessed these qualities; while other men of great ability have failed for lack of them.

What is success? What definition can

we frame that will include only the worthy and do injustice to none? Is a man successful because he has accumulated a fortune? Is he successful because he manages a great corporation? Is a man successful because he occupies a great public position? These are not the whole of success; they may be the outward show of it, the expression of it.

The foliage of the tree, though conspicuous, is a minor part of the tree's history. Its more essential life is in the deeper structure of fibre and vein, in those multitudinous roots that plow the soil for nourishment, in the microscopic veins of sap that flow from root to twig. And so in human life, the driving power of the personality is largely hidden. The work we do, our thinking and the things we say, our achievements great and small, are all the result of that residuum of experience, the moving energizing force that we call character. Character comes by slow growth—neither does it come by doing big things, nor great things, but rather the humble things done quietly. The patient doing of daily duties; the cares borne and forgotten; the vital but unremembered human contacts, the influences, the anonymous occurrences that fall into our lives as noiselessly as light, yet like grains of sand in strata, leaving a deposit that makes up the qualities of the personality.

Our guest of the evening has lived a life that now has a long perspective. When he was born Gen. Grant was only seven years old, Lincoln was working on a flat boat and Darwin was taking, as a young man of twenty, that voyage that determined his life work and changed

the world's intellectual outlook. The Great Napoleon had been dead but seven years and his body still rested on the barren Island of St. Helena. California and Texas were still a part of Mexico and Great Britain claimed the States of Oregon and Washington. The first railroad engine pulled a train at the rate of six miles an hour, the year the Doctor was born, but he was probably so busy trying to get his big toe 'in his mouth that he paid no attention to the new discovery. Gas was only being used in a few of the streets of London experimentally, a few years before the Doctor was born.

He has seen remarkable changes in his lifetime; in fact, from the material side he is now living in an essentially new world from that of 1829. And yet the human struggle intensifies and grows in bitterness, we ask the same questions, have the same ambitions, the same hopes and fears.

I think the Doctor will tell us what we older men know already and what the younger men begin to suspect, that life of the right sort is a steady pull. There is no Wayside Inn for duty or ambition. The demands of life are exigent, and especially in this twentieth century the standards are being raised, and we have come to the conclusion that the professional man who is not an actively good citizen is not fit to take up room in civilized society.

Dr. Van Slyck has always taken an active personal interest in the affairs of this community and through all the years that he has lived here he has answered the requirements of the good doctor and good citizen, and has thus

achieved the best kind of success. His life has probably been a steady pull; that kind of struggle that is necessary to bring out the stronger and better qualities.

The tree is big in girth and strong in limb because it has weathered unnumbered storms and has packed the energy of a thousand seasons into its trunk and branches; and the man who is successful in the higher sense is he who has built into his life the best results of large and earnest experience; who has known at last the value of defeat and the triumphs of disappointment, who has planned and failed, and toiled and agonized, has stumbled and fallen; who has trusted others and has been deceived and yet kept his faith in humanity and from the countless contests of life has gained in self-confidence and serenity, and from the coarse materials of experience has finally woven the fine substantial fabric of character.

To do one's duty quietly and unobtrusively, to stand for the better things in the community *without cant* and *without pretense*, to be kindly without weakness, and courageous without display, to be loyal to duty and yet just in differences, to have dignity without indifference and strength without coldness, to stand for your own rights and yet see what justice there is in your neighbor's cause, to meet these and kindred demands and ideals, is to be a person of character; it is to achieve the best kind of success.

It is the unanimous opinion of all who know Dr. Van Slyck that he fulfills these ideals.

Back of him tonight stretch more than eight decades of life, during which

he has been very busy simply doing his duty. The years of struggle, the strife, the toil, the many friends that are gone, the cheering words that he has spoken, the unpublished acts of kindness that he has done; all these are gone into the voiceless past, but we have with us the man and the character.

We are not here to flatter Dr. Van Slyck. We are here to congratulate him upon a life that has been as useful as it has been long, and to testify to our admiration for his many manly qualities, and to express to him our belief that he is entitled to be classed among those fine spirits of all ages who were faithful in the little things and therefore successful in the larger things, and who never grew old because they loved work and loved life and loved humanity.

Dr. F. F. Rowland responded to the toast:—

AS I KNEW HIM TWENTY-FOUR YEARS AGO.

Dr. Rowland's remarks were as follows:

Ever since I accepted the invitation to respond to this toast, I have been alternating between cold perspiration and hot flushes. With the passage of my allotted hours, the most of which have been spent, sleepless and weary and worn on a fast moving Pullman, until my symptoms have become so merged and mingled that I have had a temperature of 106 deg. just back of the ears and 8 deg. below zero at my feet.

The ancient Roman Emperors tortured slaves for the entertainment of their guests following a dinner. We do the same thing still, but instead of

slaves we use inexperienced speakers, which is cheaper.

When I heard that our good friend and neighbor, Dr. Van Slyck, was to be the recipient of a banquet at the hands of a few of his associates, I was reminded of what our cheery and scintillating Burdette has said of such an occasion as this.

“Next to a banquet at which there were no after dinner speeches at all, the most delightful would be one at which the jolliest toastmaster had mislaid all his stories, the best extemporaneous speakers had forgotten their speeches, readers of prosy sermons had lost their manuscripts.

How the guests would enjoy their dinners! How the table talk would be broken up into a hundred little rills of sparkling jest and merry repartee and witty comment, rather than a muddy irreshet of half dozen dreary, long orations, turbidly winding their muddy way through drowned fields of driftwood and draggled flotsam, creeping on to the sea of silence and the sea one thousand miles away.”

The best thought about the sixtieth anniversary of Dr. Van Slyck's connection with the medical profession is that it celebrates, not age, but youth.

Some people are born old and stay so to the end. Others, born young, grow old. Now and then a rare spirit comes that keeps young in spite of years. Such is Dr. Van Slyck. He has never lost his youthful interest, his joyous reaction from what he sees and hears, his relish of life and all the expressions of life that we call Art.

I do not know where you were born;

but your name would indicate a Dutch ancestry. Just from hearing you talk, I should judge you came from New York. Boston once claimed you. You are to be congratulated that you have resisted even the influence of Boston before you got a taste of this Western world. I should venture to say that you began to read voraciously soon after learning how to spell, for rarely have any of us who have known you for the last twenty-five years ever seen you without a book in your hands.

When I first came to Pasadena, Dr. Van Slyck was among the first men I tied to. It would be tedious and uninteresting to enter into details of the average physician's life here at that time. It is familiar to any of you who may have had a like experience elsewhere, in the struggle to get on in the world among new people.

There is, however, one prominent characteristic of Dr. Van Slyck that stands out in my memory of him, that gave me great assistance, and that was his eagerness to learn of, and accept new methods and ideas that began to be placed before the medical profession very prominently about twenty-five years ago. Although I soon made up my mind that he had reached that age and experience in the practice of medicine when a man may be excused for being "set in his ways," this was not, and is not true of Dr. Van Slyck. He has always been eager to accept that which appeared to have merit, but not until it had passed through a severe discriminating test, which only a trained mind that has been fortified by years of careful observation and experience is capable of judging aright.

I appeal to you enthusiasts to corroborate this marked feature of his character and ask, sincerely, for those of you who may have the hope of future years for active practice to allow this simple lesson to sink deep into your hearts and minds.

In conclusion, I earnestly apologize to Dr. Van Slyck if anything I have said may be construed by him to indicate that he may not be here to break bread with us at many a future banquet where he shall be prominent. No suggestive thoughts of "error" will prevail.

For now he has a large array of good friends to his credit—a monument of devotion to the service to the medical profession, and the expression of a keen mind and a rare character.

Dr. Walter Lindley replied to the toast: "The Relation of the Doctor to Good Citizenship."

Dr. Garrett Newkirk read the original anniversary poem that he presented at the dinner given Dr. Van Slyck ten years before.* Dr. Newkirk then, by request, also read †"The Son of Old Hippocrates," by John S. McGroarty—a poem written in honor of Dr. Frederick T. Bicknell and read first by the author at a dinner given by one hundred physicians at the California Club, January sixteenth, 1909, in honor of his ten years' service as President of the California Hospital. The next sentiment was "Greetings from Los Angeles," responded to by Dr. George L. Cole. Dr. Norman Bridge having recently trans-

*See Southern California Practitioner, May, 1902, page 195.

†See Southern California Practitioner, February, 1909, page 51.

ferred his residence from Pasadena to Los Angeles, was called on to respond to the toast: "Why I Moved to the Suburbs."

The programme closed with a reminiscent address by the guest of honor in response to the toast: "Sixty Years in the Practice of Medicine." We wish space permitted us to quote from the delightful talks of Drs. Cole, Bridge and Van Slyck. With a warm hand clasp we bade Dr. Van Slyck good-night seeing no reason why he should not be enjoying the society of his friends in Pasadena in 1922.

The following is the list of physicians who were present:

Drs. F. F. Rowland, J. H. McBride, Garrett Newkirk, C. D. Lockwood, A. T. Newcomb, C. L. King, F. C. E. Mattison, Geo. L. Cole, H. H. Sherk, J. M. Wilson, G. E. Campbell, S. P. Swearingen, W. L. Zuill, A. D. S. McCoy, Henry Sherry, E. H. McMillan, W. H. Roberts, Walter Lindley, Norman Bridge, J. D. Condit, W. D. Dilworth, R. C. Olmstead, Josephine Jackson, Caroline McQuistan, Eliot Alden, H. G. Brainerd, A. L. MacLeish, M. L. Moore, Stanley P. Black, D. B. Van Slyck, L. B. Morton, R. W. Reynolds, Dr. Smith, Dr. Hammell, H. B. Stehman, Geo. Deacon.

DR. WM. GRENDEL IN LOS ANGELES.

Dr. Norman Bridge entertained twenty-five Los Angeles physicians delightfully at a luncheon given at the California Club on Friday, February 9th, in honor of Dr. Wm. Grenfel, the noted Labrador Medical Missionary.

At the close of the luncheon Dr. Bridge made a few introductory remarks in which he stated that his only regret was that there was not room enough in the private dining-room of the Club so that he could have invited one hundred instead of twenty-five to get in touch with Dr. Grenfel and his noble work.

The guest of honor then spoke for fifteen to twenty minutes in his modest, frank and entertaining manner. Besides holding many other positions, Dr. Grenfel is the Justice, the Criminal Judge and in fact makes the criminal laws for his people, and he said that he never sent a man to jail but that he gave him the key with which he was to lock himself up at night.

He told of the great possibilities there of instructing the ignorant so that they could not only provide for their own physical wants, but also lead moral and upright lives.

The Doctor is intensely religious in the best sense of that word and stated that his great aim was to get these poor well-meaning men to follow Christ.

He also spoke of the great waste of by-products which should be utilized, as for instance, the thyroid and pituitary glands of whales and bodies of seals. He stated that 500,000 seals were killed in a season and their bodies thrown away.

Young medical men who have an ambition to put in a year or two's work with and for the people of Labrador would do well to correspond with Dr. Grenfel.

IMPERIAL VALLEY.

Imperial Valley is the very southeastern county of California. Twelve years ago it was a barren desert. Today it is a rich county with flourishing, beautiful towns and three hundred thousand acres of farming lands under cultivation. Twenty days after sowing the desert with seed the farmer will have a field of alfalfa upon which he can profitably turn his cattle or his hogs. Eight crops a year is the yield of an alfalfa field. The land of Imperial Valley is irrigated with unlimited water from the Colorado River. Instead of the land becoming poorer with cultivation, it becomes richer because the irrigating water carries a large amount of silt; in fact, is almost liquid mud. Each irrigation leaves the land stronger, more fertile than before.

Cotton is another product of Imperial Valley and we were very much interested in witnessing the work of the cotton gins, the manufacture of the oil and the baling of the beautiful cotton. Dr. C. E. Standlee met us at the town of Imperial and took us for an instructive drive throughout the surrounding country.

At Calexico we were kindly met by Dr. Wm. Fawcett Smith, who took us to his home and then across the line into Mexicali; where we saw a regiment of Madero's troops in barracks. That is they were Madero's then; whose they are by this time is a question.

We met quite a number of tuberculous people who had gone to Imperial Valley in a sad condition but who after one, two or three years of a farmer's life appear in good health. If a person with intelligence, in the early stage of tuber-

culosis, has money to buy ten acres of land, build a comfortable bungalow and wait a little while for returns, we believe Imperial Valley offers as good an opportunity for recovery as can be found. Sunshine every day. No rain wanted. We wish some Imperial Valley physician would send us a climatological article about that section giving us reliable data. The following is the list of physicians that appears in the last State Medical Register, but there have been many additions since then:

Apple, Wm. W., El Centro. 10-11 and 2-4. Hosp. Coll. of Med., Louisville, Ky., '92. (C) '02.

Bossert, Clarence Sanborn, Brawley. George Washington Univ., Washington, D. C., '08. (C) '11.

Darlington, Emlen Painter, Tumeo. Univ. of Penn., '99. (C) '11.

De Blois-Wellcome, E. Myrtle. (See Wellcome, E. Myrtle.)

Lindsey, Laurence L., Bank Bldg., Brawley. Coll. Phys. and Surg., Los Angeles, '09. (C) '10.

McCombs, V. J., Opera House Bldg., El Centro. 10-12 and 2-5. Coll. of Med. Univ. of Southern California, '00. (C) '00.

Miller, Joseph Abraham. (E) (Retired.) Brawley. Med. Coll. of Philadelphia, '64. (C) '74.

Peterson, Fred W., El Centro. Northwestern Univ. Med. School, Ill., '05. (C) '05.

Rich, Geo. D. (E) Imperial. Am. Med. Coll., Mo., '97. (C) '99.

Richter, Henry Carl, Calexico, P. O. Box 52. Jefferson Md. Coll., Pa., '06. (C) '08.

Smith, Wm. Fawcett, Calexico, 9-11,

2-3 and 7-8. Trinity College, Dublin, Ireland, '63. (C) '09.

Standlee, C. E., Imperial. Univ. of Southern California, '08. (C) '08.

Wellcome, E. Myrtle. (Not practicing.) Brawley. Med. Dept. Univ. of Southern California, '05. (C) '06.

Wimp, Wm. H., Holtville, 9-11, 2-5. Louisville Md. Coll., Ky., '05. (C) '10.

ARIZONA'S STATE SUPERINTENDENT OF PUBLIC HEALTH.

In another column will be found an announcement of the appointment of Dr. R. N. Looney, of Prescott, as the first State Superintendent of Public Health in Arizona. The appointment is a particularly fitting one and Governor Hunt is to be congratulated on his excellent judgment in naming so capable and suitable a man for this most important office.

Dr. Looney has practiced medicine in Arizona for fourteen years, and is very familiar with the sanitary problems of every part of the new state. He is a man with modern ideas, of excellent judgment, and with a large fund of "common sense." He has proven executive ability and will show enthusiasm tempered with calm judgment in initiating and enforcing sanitary measures in Arizona.

The new superintendent has in a marked degree the confidence of the medical profession of his state, and with its active co-operation should and will accomplish much in the field of Preventive Medicine.

J. W. F.

Prescott, Arizona, March 1, 1912.

THE STUDY AND PREVENTION OF TUBERCULOSIS.

The great majority of cases of tuberculosis are due to the inhalation of air

impregnated with tubercle bacilli derived from the sputum of tuberculous patients. Knowing this, the prevention of the disease would seem to be an easy matter. But the thorough diffusion of such knowledge, especially among the densely ignorant, is not so easy as it may seem. It is often difficult to induce the consumptive to destroy his sputum and live in the open air. Though at first they may regard such advice as an attempt to interfere with their personal liberty, a little tact is usually sufficient to accomplish the desired end. As a matter of fact, anyone who would knowingly scatter broadcast such virulent poison should be considered an enemy to society, and be segregated so that he might do no harm to others. And the unventilated room should have no place in modern civilization. It is a crime against health to shut out the sunlight and fresh air.

The work of the Los Angeles Society for the Study and Prevention of Tuberculosis during the present fiscal year, which began in November, has been largely educational. This period included the campaign for the sale of the Christmas seals, from which most of the funds of the Society are derived. This method of raising money is not ideal, but so far it has proven the most efficacious method at the Society's command.

To illustrate "where the money goes:" The total cash has amounted to \$4,820.76, of which there remains in bank \$1,920.32, checks having been written to the amount of \$2,900.44. These expenses are divided as follows: Seals, literature and messenger service, \$1,010.70; postage, stenographic and clerk hire, \$496.00; ad-

vertising, \$246.69; donation to California Association for the Study and Prevention of Tuberculosis, \$800.00; Red Cross people, for seals, \$250; milk, \$66.61; nurse, \$30.00.

The work of the Society so far this year has been largely educational. This is true because the opportunity presented, and it is a rule of the Society not to neglect any opportunity that may be presented to further the cause it represents. The sale of the Christmas seals through the schools, though common in many other cities, had hitherto not been practiced in Los Angeles. When the matter was presented to the Board of Education, it was unanimously adopted on the basis of its educational value to the children of the public schools. It certainly should prove a most important item in the practical hygienic education of the child, aside from any philanthropy.

The sale of the seals through the schools afforded the Society an opportunity to distribute literature to some 37,000 school children and 2,000 school teachers. All told, we have this quarter-year sent literature to 54,330 people in and about Los Angeles. Some of this seed may fall upon barren soil, but the amount of good that will be accomplished by this activity alone is almost beyond the wildest flight of the imagination.

The expense account of the Society scarcely gives a true impression of the amount of work done. Thus, the \$1,010.70 spent for seals, literature and messenger service, includes a rush order for 3,000,000 Red Cross Seals, being the first Red Cross Seals ever printed upon the Pacific Coast. This arose through the inability of the Red Cross people to

get seals from the east here in time for the sale through the public schools. To meet this emergency, the Times-Mirror was appealed to, being the largest job printing concern in Los Angeles. And in a special run of two days and a night, the emergency was met. During this time there were printed 3,000,000 seals, some 40,000 pamphlets, and 78,000 envelopes. The expense item also includes additional pamphlets, some 6,533 in number, and about 28,000 additional envelopes, besides some minor items. But for the aid of the Times-Mirror people, especially the co-operation of Mr. Crabill and Mr. Coe, the sale through the public schools would have failed. This required for a time, besides several presses, a corps of some twenty-six girls, and some strenuous effort on the part of the messenger service. As tokens of recognition of special service, the Society bestowed its emblem, the Anti-Tuberculosis Cross, upon Mr. Crabill, Mr. Coe, and the manager of the California District Messenger Company.

What will the Society do during the remainder of the year? What would you suggest? The Society, of course, will do whatever it finds to do along the line of the study and prevention of tuberculosis, believing that the utilization of the knowledge we possess may make that disease as rare among us as smallpox. The Society maintains a large clinic at the Helping Station, 737 North Broadway, devoted to the treatment of tuberculosis, open Mondays, Wednesdays and Fridays. The tuberculous poor are furnished free nursing and medical attention, and supplied with milk and medicine when advisable. This year we will treat about one thousand cases.

The Society is opposed to the repeal of the ordinance providing for the tuberculin testing of cattle, as is evidenced by the following communication to the Council of this city:

January 25, 1912.

To the Honorable City Council
of Los Angeles.

Gentlemen:—At a meeting of the Directors of the Los Angeles Society for the Study and Prevention of Tuberculosis held yesterday, it was moved that the Secretary be instructed to forward to the City Council a letter on behalf of this organization, stating that in its opinion it will be a grave mistake to repeal the tuberculin test ordinance, and that we have the greatest confidence in its efficiency and practicability when properly carried out. This motion was seconded and unanimously carried after some vigorous commendatory discussion. It was the opinion of the members present, very freely expressed, that any opposition to the ordinance must come from a very short-sighted commercialism, and that there could be no real scientific opposition to the tuberculin test.

Very respectfully yours,

THE LOS ANGELES SOCIETY FOR THE
STUDY AND PREVENTION OF TUBER-
CULOSIS.

Geo. E. Malsbary, Secretary.
501 Auditorium Building.

A POPULAR APPOINTMENT.

Dr. R. N. Looney, of Prescott, has been appointed State Superintendent of Public Health of Arizona, and took charge of the office on March 1st, 1912.

Robert Nelson Looney, M.D., was born in Tennessee, July 6th, 1870. He was educated in Nashville, securing the degree of M.D. from the Medical Department of Vanderbilt University in 1898.

During his medical course, his health failed and he was forced to spend some time in Arizona. Immediately after receiving his medical degree, he went to McCabe, Arizona, where he practiced until 1905, when he spent a year in New York doing post graduate work.

He was a member of the Upper House in the Twenty-third Legislature of Arizona.

In 1906 he opened offices in Prescott, where he is still practicing. Since beginning practice, Dr. Looney has been one of the most active members of the Arizona Medical Association, and served as its president during the year 1909-1910.

He is very popular both in the medical profession and with the general public.

EDITORIAL NOTES

Dr. A. E. Boland, formerly of Los Angeles, is located in Needles, Cal.

Dr. A. C. Carlson, formerly of Yuma, is practicing at Cedar Glade, Arizona.

Mrs. E. P. Durbin is again acting as editor of the California Hospital Alumnae Association.

Dr. T. P. Daly, of Congress, has been appointed Medical Superintendent of the State Penitentiary at Florence, Arizona.

Surgeon General Rupert Blue is endeavoring to have a quarantine station established in Los Angeles (San Pedro) Harbor.

Dr. and Mrs. A. J. Murietta, of Jerome, Arizona, spent a very pleasant week in Los Angeles and San Francisco during February.

Dr. C. G. Stivers is limiting his practice to Eye, Ear, Nose and Throat, with

offices in his residence, 1115 Arapahoe St., Los Angeles.

Dr. Geo. E. Tucker and Thos. R. Griffith of Riverside are establishing a private Sanatorium for the tuberculous in the suburbs of that city.

Dr. Francis M. Pottenger has removed his offices to suite 1100, Title Insurance Building, Fifth and Spring streets, Los Angeles.

Dr. Cecil E. Reynolds, recently of London, England, has located in suite 1100 Title Insurance Building. Practice limited to internal medicine.

Dr. Irving R. Bancroft has located in the Lankershim Building, Third and Spring street, Los Angeles, limiting his practice to G. U. and Skin.

Dr. R. C. Dryden has been elected attending physician of the County Hospital of Graham County, Arizona. The hospital is located at Safford.

Dr. Clarence Edward Ide is now located in the Laughlin Building, Los Angeles. Dr. Ide limits his practice to the Eye, Ear, Nose and Throat.

The Redlands Medical Society has appointed a committee of physicians to issue certificates to dairies that conform with the rules for a certified dairy.

Dr. Franklin S. Wilcox has come from Fergus Falls, Minn., and assumed the position of First Assistant at the Southern California State Hospital at Patton.

For an excellent portrait of Edward Jenner 9½x12 inches, suitable for framing, send twenty-five cents to *Medical Review of Reviews*, 206 Broadway, New York City.

The Long Beach Medical Society was the guest of Dr. and Mrs. E. R. Harvey on the evening of February 13th. A delightful supper was served and it was a joyous evening.

Dr. Walter Brem and Dr. Frank Thomas, both of Los Angeles, were

elected members of the Los Angeles County Medical Association at the mid-February meeting.

Dr. W. A. Ruble, president of Loma Linda Medical College, is delivering a series of free stereopticon lectures on Digestive Laws in various parts of Southern California.

Dr. James W. Richards, for three years with Dr. Bishop in his sanatorium in South Pasadena, has joined the medical staff of the Pottenger Sanatorium and his address is Monrovia.

The *Medical Review of Reviews* for February has as frontispiece an excellent portrait of Edward Jenner, together with an interesting biographical article on JENNER AND VACCINATION.

For Sale—Bausch & Lomb Automatic Laboratory Microtome and knife. Cost \$72. Will sell for \$30. Absolutely new. Address H. P. Shattuck, Room 425 Laughlin Bldg., Los Angeles, Cal.

Dr. W. M. Mason of Lodi, Cal., a member of the State Board of Medical Examiners, had his automobile demolished on February 7th by an electric car. The Doctor himself was thrown quite a distance but was uninjured.

The San Bernardino County Hospital, on the evening of February 20th, was the scene of a banquet given to the members of the San Bernardino County Medical Society by Dr. P. M. Savage, the Hospital Superintendent.

Drs. George A. Bridge, of Bisbee; E. S. Miller, of Flagstaff; A. W. Vanneman, of Douglas; N. C. Bledsoe, of Bisbee, and H. H. Hughart, of Tombstone, spent a few days in Prescott in February attending the Masonic Grand Lodge.

Dr. Frank L. Norton has removed his offices to the O. T. Johnson Building, Fourth and Broadway, Los Angeles. Dr. Norton returned a short time ago from three months in New York City, where he took a special course in the New York Lying-In Hospital.

Dr. F. D. Bullard has an excellent article on CARE OF THE EYES OF THE NEW BORN in the January issue of the *Monthly Bulletin* of the Los Angeles Health Society. This bulletin is published under the supervision of Health Commissioner Powers.

Dr. Benj. F. Kierulff, who graduated from Rush Medical College in the class of 1867, and who resides at 1936 Magnolia Avenue, Los Angeles, was recently re-registered. Dr. Kierulff cast his first vote for Abraham Lincoln in Marshalltown, Iowa.

On the evening of February 6th the San Bernardino County Medical Society held their meeting in the Physicians' Club rooms in Redlands. It was an evening of clinics and Drs. Hoel Tyler, C. G. Hilliard, D. C. Strong and C. A. Sanborn presented interesting cases and specimens.

Dr. Jno. T. Scholl, who graduated from St. Louis Medical College in the class of 1858, died at his home in Los Angeles February 15th, aged seventy-nine years. He is survived by his widow and two sons. One of the sons is Dr. A. J. Scholl, the well-known Los Angeles practitioner.

Miss Mona M. Monaghan, of The Rosena Rest Retreat, 2814 North Broadway, has just returned from six months in the East, where she has been visiting hospitals and sanitariums and making a study of the branch of work in which she specializes—the care of nervous and mental cases.

Dr. D. W. Hunt, the well-known physician of Glendale, suffered from a fracture of both bones of the left leg below the knee by a fall from the street car. Dr. Hunt graduated from the Medical Department of the University of Michigan in the class of 1871. The last reports stated that he was doing well.

Dr. Clarence Moore of Los Angeles read a paper before the Redlands Physi-

cians' Club on the evening of February 13th. The subject of his paper was "The Diagnosis and Treatment of Gastric and Duodenal Ulcers." There were twenty-seven physicians present and the paper was highly appreciated.

Dr. Idris B. Gregory delightfully entertained the Pomona branch of the Los Angeles Medical Society and the San Bernardino County Medical Society at her home in Ontario on Tuesday evening, February 27th. Papers were read by Drs. T. H. Smith and F. H. Kenyon of Pomona, after which Dr. Gregory was hostess at a most delicious supper.

Dr. Benj. F. Church of Redlands recently entertained the San Bernardino County Medical Society at the University Club. After an elegant dinner at which Dr. Church was host, he delivered a short address on the benefits of Medical Organizations. Dr. Howard Hill read a paper on "Fractures of the Elbow." The paper was illustrated with radiographs.

Dr. A. E. Osborne of Santa Clara recently paid a hurried visit to Southern California. His object was to stimulate an interest in establishing a farm retreat for epileptics. Since Dr. Osborne's visit to Los Angeles he has been appointed Superintendent State Hospital for the Insane at Napa which the profession of California will approve as a wise selection.

The 1912 officers of the Yavapai County Medical Society are: President, A. J. Murietta, of Jerome; Vice-President, C. E. Pearson, of Prescott; Secretary-Treasurer, C. E. Yount, of Prescott. Delegates to the Arizona Medical Association: R. N. Looney, of Prescott; A. J. Murietta, of Jerome. Alternates: C. E. Yount, of Prescott, and H. T. Southworth, of Prescott.

Dr. Jno. W. Wainwright of New York City has purchased the two medical journals, the *American Practitioner* and

News, of Louisville, Ky., and the *New England Medical Monthly*, of Boston, Mass., and will combine these two journals into one, giving the new the title of *The American Practitioner*, incorporating, etc., and issue from New York City monthly, the first appearing March, 1912.

Dr. Hannah Searing died at Chula Vista, Cal., on Saturday evening, February 3rd, age eighty-two years. The Doctor was born in Cayuga County, New York, graduated from the College of Oberlin, Ohio, and then took the degree of M.D. from the University of Michigan. She was the first woman who received the degree of medicine from the Ann Arbor Institution. She took a great interest in the colored people of the South during the war and was a personal friend of President Lincoln and Wm. H. Seward.

Dr. Chas. H. Carleton, whose license was revoked last August by the California State Board of Medical Examiners, has disappeared from Los Angeles. He is wanted for the murder of Sadie Jones, a seventeen-year-old girl, by illegal operation. Hubert T. Morrow, Esq., the special agent for the State Board of Examiners, says the operations of these professionals has exceeded yearly the birth rate of Los Angeles and out of every one hundred of their patients, five have died. It is said that Carleton escaped from the detectives disguised as a woman.

The Charity Ball that is to be given April 10th, at the Shrine Auditorium, Los Angeles, for the benefit of the Barlow Sanatorium, is sure to prove a great success. Tickets are for sale at the office of the California Hospital. Prices, \$1.00, \$2.50 and \$5.00. A citizen of Los Angeles has offered to give \$1.00 for every dollar that is received for tickets at this ball. We have no doubt but his generosity will be rewarded by the opportunity of giving at least \$10,000. There never was a better

charity and we trust that every physician will take at least interest enough to buy one ticket.

The following have recently been elected members of the Los Angeles County Medical Association: Drs. Charles R. Jennings, Compton; J. Margaret Roberts, Los Angeles; E. L. Biggs, Los Angeles; H. P. Wilson, Whittier; Leo A. Schroeder, Los Angeles; Don P. Flagg, Los Angeles; Walter S. Boggs, Pasadena; Harold H. Smith, Los Angeles; Albert Winn, San Pedro, Cal.; Clifton E. Gage; Henry M. Dale, 208 Lissner Bldg., Los Angeles; Henry F. Hoyt, Long Beach; Milton Du Jeffs, Los Angeles; F. B. West, Los Angeles; F. J. Wagner, Santa Monica; Edwin D. Ward; Augusta Zuber, 630 Auditorium Bldg., Los Angeles.

We motored out to Monrovia a few days ago and visited the Pottenger Sanatorium. The sixteen miles' ride from Los Angeles over excellent roads through orange groves and natural oak forests in the shadow of the Sierra Madre Mountains is perfectly delightful. The avenues of eucalyptus with branches over-arching the roadway are remindful of the elms of rural England. Monrovia is a well kept, prosperous town of several thousand people. Overlooking the town and the valley below to the Pacific Ocean and the islands in the ocean, situated on a shoulder of the mountain is Dr. Pottenger's sanatorium. The Pottenger Sanatorium consists of a commodious administration building surrounded by sixty attractive cottages. Dr. Pottenger can well be proud of this great institution that is drawing patients from all parts of the civilized world.

Dr. Stanley P. Black, for many years Health Officer of Pasadena, recently diagnosed a case of smallpox and afterward called in Dr. Powers of Los Angeles, who decided it was not smallpox. The matter caused considerable excitement, especially in the schools, and

after the consultation with Dr. Powers Dr. Black addressed the following note to the mayor: "Today I had Dr. L. M. Powers and Dr. F. F. Rowland to see Mr. Hawks' child. They pronounced the case not smallpox. In view of the publicity of the case and the mistake in diagnosis, I believe it best for the health department of the city that I retire from office. Therefore, I beg that you will accept my resignation as a member of the Board of Health." The physicians of Pasadena think that Dr. Black was too sensitive in regard to criticism and have almost unanimously urged him to reconsider his resignation.

Dr. Henry B. Stehman says in regard to the La Vina Sanatorium, which is located in the foothills just east of Pasadena: "La Vina is a sanatorium for the resident tuberculous in all stages, with limited or no means. It is situated five miles to the northwest of the city on a tract formerly known as Giddings' ranch, comprising 240 acres. It has a vineyard of about three acres which produced more than 8000 pounds of delicious table grapes last year. It was the vineyard (La Vina) that suggested the name for the sanatorium. There are seventeen buildings exclusive of the ranch house and barn. The first patient was received August 26, 1909,

and down to December 31, 1911, 128 patients were received and 21,846 days of treatment were given. The daily average for the year 1911 was 32 and the weekly cost per capita \$10.50. The current expenses for the last year were \$16,581.12; of this amount \$5126.13 was contributed by patients. The maximum weekly rate for those who can pay is \$7; patients who can pay the prevailing rates of the private sanatoriums are not received. There were 20 free beds last year supported at a cost of \$400 annually by different individuals and organizations. The balance of the deficit for current expenses was met by subscriptions from \$1 up. It is estimated that it will require \$20,000 this coming year to carry on the increased work, and it is hoped that the number of free beds will be doubled. By the middle of February the administration building and the new infirmary will be ready for occupancy; this will double the present capacity and will give 60 beds. In the coming year the infirmary will be completed and this will increase the capacity to 90 beds. The attending staff are Drs. Charles Lee King, Henry B. Stehman, W. H. Roberts, Norman Birdge. Resident physician, Dr. Caroline McQueston. Superintendent, Miss Mary Elizabeth Weatherford."

CORRESPONDENCE

A MENSTRUATING BABY.*

Calexico, Cal., Feb. 17, 1912.

The Editor,

Southern California Practitioner,
Los Angeles.

The case reported below is so unusual that it seems to me worth recording:

Last month I attended a primipara, 22 years of age, and of perfect physical

development, the child being a typically fine specimen. On the seventh day after labor I was called to see the baby, and found the mother greatly alarmed on account of a discharge of blood per vaginum. There was an unusually large amount of milk in the breasts, and well marked dark circles under the eyes. There had been no evidence of pain or other disturbance of the health. The flow lasted three days. Just 28 days later the phenomenon was repeated ex-

*Imperial Valley is the most precocious section of America.—Editor.

actly in every detail, except that there was no milk in the breasts, but these were much fuller than ordinary. Personally I have never met with a similar case, and it will be interesting to watch its future course, and see if true menstruation is established. The discharge exhibited all the signs of menstrual blood.

WM. F. SMITH, M.D.

A NOTE ON EPIDEMIOLOGY OF TYPHOID FEVER.

BY E. S. GOODHUE, A.M., M.D.

Holualoa, Hawaii.

Early in December, 1910, there occurred at Honaunau, Kona, four cases of typhoid fever, introduced through contact with patients from an infected point about 10 miles distant.

Some months after recovery, the family moved out, leaving the house vacant until the middle of July, 1911.

The house is a large two-story, barny affair, made of unplanned nor'west boards with numerous cracks and openings.

There are three rooms on the ground floor, two of them on the bare ground, the other having a floor of loose boards. No one occupied the upstairs.

As the building has always been occupied by Japanese, after the Oriental fashion, considerable refuse, garbage, urine, etc., had been thrown about the house. This was stopped, of course.

As soon as the house was vacated, the Japanese doctor who had attended the patients, fumigated the premises with formalin and permanganate of potassium, disinfecting the places which had been polluted by the emptying of slops. The feces had been thrown into a vault and covered with lime. A tank containing water for household purposes was not emptied.

The middle of August a new family moved in, a Japanese laborer and his wife who had just arrived from Japan.

They lived on the ground floor, sleep-

ing and eating in the rooms previously occupied by the parties who had been ill with typhoid fever, and using water for cooking, drinking and bathing purposes from the tank.

January 8, 1912, the wife, age 24 years, was taken ill with what proved to be typhoid fever. She is now in my hospital.

The only other cases of typhoid fever in the district from August till the infection of the woman, were some natives at Kawaaloo about 8 miles away. With these there could have been no communication as they were in quarantine.

In November a case occurred at Kealekekua, ten miles distant, also a native who was removed at once to the hospital.

It would look as if the infection came from the house itself which the new family entered in August, but no evidence of it appeared till nearly five months afterwards.

Neither could the woman have been infected before coming to the house, at least according to our present incubatory theories. I have made a note of the incident because it is rather unusual, and shows how long the typhoid bacillus will retain its power to infect. It also indicates the need for thorough disinfection of all typhoid premises and fomites, not only by fumigation, but by spraying and scrubbing floors, walls, etc., besides removal of soil which may have become polluted; emptying of tanks and cisterns, and, in old, decayed buildings or grass huts, their destruction by fire.

After fumigation of some 100 houses under my personal supervision, we had no recurrence of typhoid in any of them the next year except one due to auto-infection, as, in a family of seven, no other cases occurred after an interval of 11 months. The boy taken ill had had typhoid fever 11 months previously, convalesced, grown strong again, and then been reinfected to die later in the hospital.

Holualoa, Hawaii, Feb. 10, 1912.

BOOK REVIEWS

THE SURGICAL CLINICS OF JOHN B. MURPHY, M.D., at Mercy Hospital, Chicago. Volume I, No. 1. Octavo of 133 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1912. Published Bi-Monthly. Price per year: Paper, \$8. Cloth, \$12.

These "Clinics" are being issued in serial form, one number every other month (six numbers a year). Each number is to contain about 130 octavo pages, illustrated. The price (sold only by the year) has been fixed at \$8.00 in paper binding, \$12.00 in cloth.

These clinics are published just as delivered by Dr. Murphy, being reported by a medical stenographer. Dr. Murphy has in his lectures a colloquial style that is all his own, e. g.: in the clinic on Salvarsan, while speaking of the considerable number of deaths following its administration, Dr. Murphy says: "We have been fortunate in not having had an unfavorable result, and I feel like kicking a post when I say this, because we are powerless to control, so far as we know, the conditions that produce the unfavorable results. I have learned of four cases of deaths in Chicago. Two of these followed the intravenous injection of Salvarsan, and in two it was injected into the muscles. One of these patients died a few hours after a subcutaneous injection, and the other died within a couple of days. The patient into whom the Salvarsan was injected intravenously died on the table, and another patient died shortly after leaving the table." There are nineteen clinics covering the following subjects: Carcinoma of the Breast, Lipoma of the Shoulder, Varicocele, Nerve Anastomosis, Salvarsan, Cystadenoma of the Breast, Pelvic Tumor, Exploratory Laparotomy, Fracture of the Patella, Blood Clot in the Bladder, Tuberculosis of Kidney, Charcot's Disease of the Hip Joint, Epithelioma of the Nose, Pelvic Tumor, Duodenal Ulcer, Hydrops, Hemangioma

of the Leg, Fistula in Ano, Arthritis of the Wrist Joint.

PRACTICAL GYNECOLOGY, a comprehensive textbook for students and physicians by E. E. Montgomery, M.D., LL.D., Professor of Gynecology, Jefferson Medical College; Gynecologist to the Jefferson Medical College and St. Joseph's Hospital; Consulting Gynecologist to the Philadelphia Lying-in Charity, the Kensington Hospital for Women, and Consulting Surgeon to the Jewish Hospital. Fourth Edition, revised and rearranged, with five hundred and eighty-nine illustrations, the greater number of which have been drawn and engraved specially for this work, for the most part from original sources. Price, \$6.00 net. Philadelphia: P. Blakiston's & Co., 1012 Walnut Street. 1912.

No gynecologist can claim a more substantial respect and confidence from the profession of America in this special branch in surgery than the author of this work.

He is one of the authorities who never deals in pyrotechnical coruscations, but instead goes constantly along doing good substantial, progressive work, and at the same time teaching a large body of students in a luminous and lasting manner.

Although a professor of the Jefferson Medical College, Dr. Montgomery when in attendance at the recent meeting of the A. M. A. in Los Angeles, was the special guest at a banquet of the alumnae of the Medical Department of the University of Pennsylvania. His presence created great enthusiasm and his address was on that occasion punctuated from time to time with loud applause. This demonstrated that the admiration and high esteem for him was not by any means limited to the alumnae of Jefferson.

The author shows the key to his character in the last paragraph of the preface of the first edition, when he says:

"Should it be the means of lightening the work of the student, of making more clear the pathway of the busy

practitioner, and, most of all, of benefitting suffering women through improved methods of diagnosis and treatment, I shall feel well repaid for the many days and nights of labor which it has cost."

In this, the fourth edition: "the acute and chronic inflammations of the uterus and of the peritoneum are largely rewritten. Vaccine and serotherapy are carefully considered. Early recognition, and prompt as well as radical treatment of cancer of the uterus, are advocated."

The illustrations throughout are satisfactory, but those of the operations for correcting lacerations of the pelvic floor are peculiarly graphic, and will throw a perfect light upon the technic of the various perineal operations.

DISEASES OF INFANTS AND CHILDREN. By Henry Dwight Chapin, A.M., M.D., Professor of Diseases of Children, New York Post-graduate Medical School and Hospital; Supervising Physician of the Children's Department, New York Post-graduate Hospital; Attending Physician at the Willard Parker and Riverside Hospitals; Consulting Physician to the Randall's Island Hospital; to St. Agnes Hospital, White Plains; to Convalescent Home for Children, Sea Cliff, and to the Hackensack Hospital; President of the American Pediatric Society (1910-11), and Godfrey Roger Pisek, M.D., Professor of Diseases of Children, University of Vermont; Adjunct Professor of Diseases of Children and Attending Physician to the New York Post-graduate Medical School and Hospital; Visiting Pediatricist to the New York Red Cross Hospital; Adjunct Attending Physician to the Willard Parker and Riverside Hospitals; Attending Physician to the Darrach Home for Children. Second edition, revised, with 181 illustrations and eleven colored plates. Published by William Wood & Co., New York. Price \$4.50 net.

It is a pleasure to review this work. In a compact volume of 636 pages, there is a thoroughly practical exposition of the older bedside diagnostic methods and an excellent resumé of the more recent tests. The treatment of special diseases by vaccines, especially the autogenous, has been exemplified and made practical. Syphilis in its relation to the Wasserman test and the new arsenic therapy, has received lucid discussion.

Referring to the diagnostic use of tuberculin subcutaneously, the dose which is safe in children is given as one ten-thousandth of a cc. of Koch's old tuberculin, one three-thousandths being the maximum dose. The Von Pirquet, Calmette and Morro tests are also described. The Von Pirquet today has the greatest number of advocates, since it is reliable and the least annoying to the patient.

Catalysers. The remarkable results obtained in industrial chemistry with catalysers in producing substances which have heretofore been obtainable only by the action of living substances, seems to indicate that catalysts play a great part in nutrition.

Vaccine therapy. Based on personal work, the following dosage is recommended tentatively:

Organism.	Dose.	Interval.
Staphylococcus	100-1000 million	Ten to fourteen days.
Streptococcus	5-12 million	Daily.
.....	25-50 million	Every tenth day.
.....	50-250 million	Seven to ten days.
.....	(infant 10 million)	In pneumonia smaller doses at more frequent intervals.
Gonococcus—acute	5-50 million	Seven to ten days.
Chronic	50-500 million	
Typhoid bacilli—immunity	750-2000 million	In two doses at fourteen days' interval.
Treatment	40-250 million	Every other day.
Bacillus coli	10-50 million	Eight to twelve days.

The preparation of a vaccine is comparatively simple. The organism to be

used is grown in pure culture. The culture is taken up in physiological salt solution, which is shaken until evenly distributed, after which it is standardized so that each cc. contains a definite number of bacteria. These bacteria are then killed by heating to 60° C. for one-half hour, and 0.5% of carbolic acid is added as a preservative.

G. E. M.

COLLECTED PAPERS BY THE STAFF OF ST. MARY'S HOSPITAL (MAYO CLINIC) FOR 1910. Octavo of 633 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1911. Cloth, \$5.50 net.

This second volume from the Mayo's Clinic by the staff of St. Mary's Hospital, is presented with the statement that the authors have consented to have their various papers bound in book form once a year, or whenever it seems desirable. A fortunate decision as the material is thus permanently preserved in a convenient form, material too valuable to be lost or scattered in the various journals.

The volume contains three indices, one of contributors, one bibliographic and one of subjects; it would be a great improvement if a fourth had been added, in a condensed form, of the matter in the preceding volume or volumes. If this plan be adopted the reader will find his work simplified.

The papers are again arranged under generic headings, as the Alimentary Canal, which occupies a little more than half the volume; a single paper on Hernia; a valuable series on the Ductless Glands; the Head, Neck and Extremities; a single paper on Technic, confined to Skin Flaps and Skin Grafting; the final chapter is styled General Papers, which are impossible to classify in a review.

When there is so much that is good it is difficult to select any one contribution for special commendation.

Judd's ten pages on mixed tumors of the parotid glands are very interesting, as he reports 41 cases in the parotid, but 4 in the submaxillary, and none at all in

the sublingual. We agree that the endeavor to preserve all the fibres of the seventh nerve may be said to be the cause of most recurrences following the removal of mixed tumors of the parotid gland. These tumors do not involve the lymphatics until very late; if the growth is extending into the parotid and the lymphatics are involved, the facial nerve is sacrificed, sometimes also the external carotid artery and the internal jugular vein.

The Technic of the Examination of Esophageal Lesions, by Plummer, and the Diagnosis and Surgical Treatment of Esophageal Diverticula, by C. H. Mayo, are noteworthy, as here is described Dunham & Mixters use of swallowed thread in the diagnosis of small esophageal strictures. Plummer has used it with success and the method is well illustrated in Plate III, page 36.

The paper by William Carpenter MacCarty on the Pathology and Clinical Significance of Gastric Ulcer is the result of the immediate examination of early ulcers during and after resection, an advance from the former pure autopsy and clinical findings of a few years ago.

The paper is based upon an examination, within two minutes, of fresh specimens after removal from 216 resections of the stomach for ulcer, ulcer and carcinoma, and carcinoma.

From a pathologic standpoint, during the observations, the following questions arose: What is the life history of gastric ulcers? How do they begin, progress and terminate? What are the gross and microscopic characteristics and how do they differ from the so-called ulcerated gastric carcinomata? Viewed from a clinical diagnostic standpoint: Can we be sure that we are dealing with the simple gastric ulcer? What are the chances for it not being a simple ulcer?

From a therapeutic standpoint: In a typical ulcer history, what are the chances that the medical or hygienic measures are combating a condition

which we know is certainly incurable by such measures? At operation, what are the difficulties in making a differential diagnosis between a benign ulcer and a malignant ulcer?

After a most carefully prepared study the following resumé is appended:

1st. Ulcers may be single or multiple and in different degrees of extension in the same specimen.

2nd. After the initial destruction of the mucosa, there is definite deepening of the ulcer by necrosis.

3rd. This deepening is sufficiently slow to allow to be formed a dense connective tissue barrier against perforation.

4th. Ulcers heal, perforate, and become malignant.

5th. Perversion of the glandular elements occurs in the mucosa, and the cells then invade the submucosa.

6th. It cannot be said that all carcinoma of the stomach have developed on ulcer. Carcinomatous tissue in the base of an ulcer may be an ulcer about primary carcinoma. In the body of the paper MacCarty states that 71 per cent. of the resected specimens of gastric carcinoma were associated with ulcer, and 68 per cent. of the resected gastric ulcers were associated with carcinoma.

7th. Duration of clinical history is no positive index of extent of the lesion.

8th. The absence of blood in the vomitus or gastric contents at the time of laboratory analysis, when associated with gastric symptoms, is not evidence against the presence of ulcer.

9th. Clinically, with our present means of diagnosis, it is impossible to say that a gastric ulcer is not malignant.

10th. The intimate relationship between irritation in the appendix or caecum and gastric disturbance may have some bearing in the etiology of ulcer.

If these ten aphorisms were committed to memory by the general practitioner, the chapter on carcinoma or the textbooks

would need revision and would not be so discouraging.

The entire cancer problem is the most important which confronts mankind, but we are unfortunately but little nearer its final solution; all forms of animal life are liable to some form of cancer. We now know that cancer is not hereditary; some families may have a favorable soil, however. The modern laboratory study of cancer has materially aided in the cure of the disease. When it was shown that all there is of cancer is the cancer-cell itself, and that each cell has the possibility of unlimited cell division, and when it was still further shown that at one time, early in their career, all cancers are purely local—the period at which they are curable—enormous strides in saving human life were made. The practitioner of the future, who procrastinates while watching the growth of a tumor, will, as Mayo says, be held accountable to the general public, and he can no longer shelter himself behind venerable but exploded theories. The conclusion is inevitable that all cancers in all parts of the body are necessarily surgical from their inception. A suspicion of cancer should lead to a surgical consultation.

Finally, when Heidenhain and others correctly showed the relation of the lymphatics to the spread of cancer, a practical step of inestimable value was added to its eradication.

Under this modern conception of the nature of cancer, William J. Mayo presents a very valuable paper on the surgical cure of cancer of the gastro-intestinal canal, and concludes that there is no reason why operations for cancer of the gastro-intestinal canal should not show results as good, both immediate and remote, as operations for cancer in any other part of the body.

MacCarty presents another paper that the reviewer cannot pass in silence. It is a most estimable dissertation on the pathology of the gall bladder and some associated lesions. He considers the

gall bladder, liver, duodenum, pancreas and stomach as one physiologic system, closely related embryologically, anatomically, physiologically and pathologically.

The lesions in the gall bladder are not definite entities, but are degrees in a process of reaction to irritants. He divides these into eight groups. Pericholecystitis acuta and chronica occur as sequels of the above-mentioned eight degrees in the process of reaction in the gall bladder.

Pathologic conditions in the duodenum are frequently associated with lesions in the gall bladder and liver.

A very pertinent conclusion is that a high percentage of appendices showing chronic and subacute conditions is found associated with cholecystitis and may be an etiologic factor in its production, a conclusion that to the reviewer seems to be of great clinical importance, and is entirely in accord with his own experiences.

When one is reading this book for the purpose of review, the temptation is to go on and on, commending one chapter after the other, but enough has been said to show the character of the volume and the necessity of placing it in the possession of all who wish to keep themselves *au courant* in the work of the phenomenal clinic maintained by the Mayo's.

WILLIAM A. EDWARDS.

ALCOHOLIC DRINKS AND NARCOTICS. THEIR NATURE AND THEIR EFFECTS UPON THE HUMAN SYSTEM. By Frank R. Keefer, A.M., M.D., Lieutenant Colonel Medical Corps United States Army, Professor of Military Hygiene, United States Military Academy, 681 West Point, N. Y. 1911.

This small volume has been written for the use of Cadets at the Military Academy to meet the requirements of an Act of Congress. It is divided into five chapters, and at the end is appended a glossary of scientific terms used, and a bibliography.

On the page preceding each chapter

is a quotation from some public man or medical authority. The book is simple and direct and free from unprofitable discussion.

Chapter I treats briefly the nature of alcohol, the alcoholic drinks and the alcoholic patent medicines.

Chapters II and III deal with the effects of alcohol on the tissues and vital processes of the human body. We are told that alcohol is a protoplasmic poison; that nearly twenty-one per cent. of the lunatics suffer from alcoholic insanity; that the use of alcohol injures the heart, the blood vessels, the digestive apparatus, the kidneys, the eyes, and the generative functions.

Discussing the food value of alcohol he admits that it may be burnt in the body, but says that alcohol is not a practicable food. In summing up the claims for the use of alcohol as a stimulant to digestion, he says: "Strong digestions do not need it, and weak ones are disturbed by it."

Of its use as a general stimulant, he says: "At times when food can not be administered, it undoubtedly has a certain value. Yet even here its beneficial action is apt to be impaired by its objectionable qualities."

Chapter IV gives a summary of the use of alcohol as a beverage. Here we find a table of the useful and deleterious effects of alcohol. The great array of data presented "against alcohol" when compared with the pitiful and trifling claims "for alcohol" should convince any thoughtful person of the wisdom of refraining from alcoholic drinks. We are sorry to find the following on page 41: "The canteen is thus the friend of decency and discipline." This is in a measure counteracted by the quotation from Emperor William, which is at the beginning of the chapter, in which he says: "Victory in the next war will crown the colors of the nation which consumes the least alcohol." The canteen may

be a "friend" of the "old soak," but it is surely a menace to the desirable men who have not yet learned to drink.

Chapter V discusses the narcotic drugs other than alcohol.

All in all, this is a most admirable presentation of the subject of alcohol and narcotics, and its use in the classroom at West Point will give the Cadets a clear idea of the subject, and will undoubtedly result in an increase of temperance amongst the younger officers of the Army.

We hope to see the book reprinted so that a copy may be placed in the library of every organization in the Army. It should be used as a text book in the non-commissioned officers' school, and it would be well to require a knowledge of the subjects of those who are commissioned from civil life.

ISAAC W. BREWER.

FURTHER RESEARCHES INTO INDUCED CELL-REPRODUCTION AND CANCER, consists of papers by H. C. Ross, M.R.C.S. England, L.R.C.P. London; J. W. Cropper, M.B., M.Sc. Liverpool, and E. H. Ross, M.R.C.S. England, L.R.C.P. London, with illustrations. The McFadden Researches, P. Blakiston's Son & Co., Publishers, 1012 Walnut Street, Philadelphia, Pa.

These papers outline a continuation of the results of the researches which were published by Blakistons eight months ago in a book entitled *Induced Cell-Reproduction and Cancer*. The book described a method by which it was found that human white blood-corpuscles and other cells can be made to divide when they are absorbing certain chemical agents from a film of jelly set on a microscope slide. The chemical agents evidently cause the divisions; and this fact formed the basis of a theory as to the possible causation of benign and malignant growths within the body, and led to the elaboration of experiments to try to prove the theory in question. Dr. Ross says: I do not wish to imply that we originated the idea that cell-reproduction is affected by chemical agents, because certain

substances were described as influencing the development of the eggs of certain fishes long before we induced human cell-division. But the work with human cells and the isolation of the actual chemicals is new, as well as the deduction from this work that normal cell-division is brought about by cell-death.

We have received

PROCEEDINGS OF THE CANAL ZONE MEDICAL ASSOCIATION

for the half year ending October, 1910. The proceedings contain the following papers:

Oriental Sore in Panama with report of an Autochthonous Case, by S. T. Darling, M.D., Chief of Board of Health Laboratory, Ancon Hospital; An Unusual Type of Oriental Sore, by A. B. Herriek, M.D., Chief of Surgical Clinic, Ancon Hospital; The Value of Trophic Bone Changes in the Diagnosis of Leprosy, by A. B. Herriek, M.D., Chief of Surgical Clinic, Ancon Hospital, and T. W. Earhart, M.D., Physician, Ancon Hospital; Bacillus Dysenteriae Recovered from the Peripheral Blood and Stools of Cases in Panama, by S. T. Darling, M.D., Chief of Board of Health Laboratory, and L. B. Bates, M. D., Bacteriologist, Board of Health Laboratory, Ancon Hospital; Murrina, A trypanosomal Disease of Equines in Panama, by S. T. Darling, M.D., Chief of Board of Health Laboratory, Ancon Hospital; The Need of the Early Diagnosis of Tuberculosis from the Public Health and Prognostic Points of View, by Surgeon Wm. H. Bell, U. S. N., Superintendent, Colon Hospital; Concerning the Diagnosis of Early Pulmonary Tuberculosis, by Walter V. Brem, M.D., Chief of Medical Clinic, Colon Hospital; A Report on Hemoglobinuric Fever in the Canal Zone. A Study of Its Etiology and Treatment, by W. E. Deeks, M.D., Chief of Medical Clinic, Ancon Hospital, and W. M.

James, M.D., Physician, Ancon Hospital; Diseases of the Faucial Tonsils with Special Reference to Tonsillectomy, by Dr. Howard V. Dutrow, Physician, Ancon Hospital.

The paper on the Early Diagnosis of Pulmonary Tuberculosis will especially interest the profession of Southern California, as we are all awake to the subject, and because Dr. Brem, the author, has recently located in Los Angeles.

NERVOUS AND MENTAL DISEASES, VOLUME X of the Practical Medicine Series. Edited by Hugh T. Patrick, M.D., and Peter Bassoe, M.D. The present volume is one of a series of ten issued at about monthly intervals, and covering the entire field of medicine and surgery. Each volume being complete for the year prior to its publication on the subject of which it treats. pp. 245. Price of this volume, \$1.25. Price of the series of ten volumes, \$10.00. This series is published primarily for the general practitioner, at the same time the arrangement in several volumes enables those interested in special subjects to buy only the parts they desire. **THE YEAR BOOK PUBLISHERS**, New No. 180 N. Dearborn Street, Chicago.

The increasing sales of this Practical Medicine Series is satisfactory evidence of the value of the books. It is impossible for any doctor of medicine to cover the entire field of medicine and its specialties in his reading as thoroughly as it is covered in this series, and few can discriminate as wisely. Dr. Patrick has had great experience in editorial work, and his standing as a neurologist is the best. This volume fully sustains his reputation. It is interesting and comprehensive review of neurological and alienist literature for 1911.

PRACTICAL ELECTRO-THERAPEUTICS AND X-RAY THERAPY, with Chapters on Phototherapy, X-Ray in Eye Surgery, X-Ray in Dentistry, and Medical Legal Aspect of the X-Ray. By J. M. Martin, M.D., Professor of Electro-Therapeutics and X-Ray Methods in the Medical Departments of Baylor, and of Southwestern Universities, and in the State Dental College, etc., etc., Dallas, Texas. Containing 219 Illustrations. Price, \$4.00. St. Louis: C. V. Mosby Company. 1912. pp. 446.

This is a very admirable book in every way. The style and descriptions are excellent, and no extravagant claims

are made, and yet the author shows that the range of usefulness, practical therapeutic efficiency of the several forms of current used is very wide. Just such a book should be carefully read by every physician. It will be worth many times its cost to any doctor who will buy and read it.

THE TAYLOR POCKET CASE RECORD. By J. J. Taylor, M.D. Copyrighted, 1911, by The Medical Council Co. Price, \$1. Published by The Medical Council Co., 42nd and Chestnut Streets, Philadelphia, Pa.

This unique Pocket Case Record has been a favorite for many years. It will be sent postpaid on receipt of price.

BLAIR'S POCKET THERAPEUTICS. A Practitioner's Handbook of Medical Treatment based upon the most Authoritative and Practical Methods and a Rational Treatment of Symptoms. Containing many means not commonly mentioned in the textbooks and a plan for the solution of the Vexed Question of Drug Dosage. Price, \$1. By Thos. S. Blair, M.D., Neurologist Harrisburg (Pa.) Hospital; Author of "A Practitioner's Handbook of Materia Medica" and of "Public Hygiene;" Member American Medical Association, etc. Published by The Medical Council Co., 42nd and Chestnut Streets, Philadelphia, Pa. 1911.

Arizona Sketches, by Joseph A. Munk, M. D. Illustrated. The Grafton Press, publishers, New York. This is a delightful book by a Los Angeles physician. The volume is beautifully illustrated.

THE ARCHIVES OF INTERNAL MEDICINE. Volume 8, Number 6, December 15, 1911. Editorial Board: Richard C. Cabot, Boston; George Dock, St. Louis; Theo. C. Janeway, New York; Warfield T. Longcope, New York, and W. S. Thayer, Baltimore. Published by the American Medical Association, Chicago.

The first article of this number is An Experimental Study of the Pain Sense in the Pleural Membranes, by Joseph A. Capps, M.D., Chicago. In view of some of the recent work on the peritoneum in its relation to pain and shock, this article on the pleura is especially interesting. After a pretty thorough consid-

eration of the subject, Capps comes to the following conclusions:

1. The visceral pleura is not endowed with pain sense.

2. The parietal pleura is richly supplied with sensory fibres from the intercostal nerves. The power to locate sensory impressions seems more highly developed in the anterior and lateral aspects than in the posterior.

3. The diaphragmatic pleura derives its sensory supply from two sources, the phrenic nerve and the last six intercostal nerves. The central portion of the diaphragmatic pleura is innervated by the phrenic nerve. Irritation of this portion sets up pain in the neck. A peripheral rim of the diaphragmatic pleura, which is two or three inches wide anteriorly and laterally, and a segment corresponding to the posterior third of the membrane, are innervated by the sensory fibres of the intercostal nerves. Irritation of these areas gives rise to pain in the lower thorax, in the lumbar region, or in the abdomen.

4. The pericardial pleura receives its sensory innervation chiefly, if not exclusively, from the phrenic nerve. Irritation of this part of the pleura is followed by pain in the neck similar to that induced by irritation of the central portion of the diaphragmatic pleura.

5. In an extensive series of cases of diaphragmatic pleurisy, in some of which the diagnosis was confirmed by autopsy, pain of the segmental type over the lower thorax, abdomen or lumbar region was present in the great majority. In about one-half of the cases, pain in the neck was complained of. This cervical pain was always in the region supplied by the third and fourth spinal segments, showing a preference for the trapezius ridge. There was always a point of maximum pain and a surrounding area of hyperalgesia and hyperesthesia of the skin.

6. As a result of a few observations, it is believed that there is considerable

clinical evidence to show that the phrenic and intercostal nerves supply the peritoneal surface of the diaphragm with pain sense, as well as the pleural.

G. E. M.

THE ARCHIVES OF INTERNAL MEDICINE. Volume 9, Number 1, January 15, 1912.

In this issue there is an important paper on The Curability of Idiopathic Epilepsy, with report of 29 cures, by L. Pierce Clark, M. D., Consulting Neurologist, Craig Colony for Epileptics, Sonoma, New York. We do not like the term "idiopathic," but possibly that is a minor matter. At any rate, it has the endorsement of long usage. Belief in the curability of major epilepsy is not new. Hippocrates declared the disease curable up to the age of 14 years by proper regimen and change of abode. Trousseau, before the introduction of the bromides, observed 20 cures among 150 patients. The paper is based on cases subjected to hygienic treatment, to which the author would attribute the so-called spontaneous cures so frequently reported. Fortunately, the hygienic treatment of these cases is not incompatible with other therapeutic measures, especially those that seek to place the body in a normal condition and keep it there. Usually diatetic measures are very important.

G. E. M.

THE UNHAPPY HOME LIFE.

The terrible part of home life is that every piece of furniture in the house forms a link in the chain which binds two married people long after love has died out—if, indeed, it ever existed between them. Two human beings—who differ as much as two human beings always must do—are compelled to adopt the same tastes, the same outlook. The home is built upon this incessant conflict. The struggle often goes on in silence, but it is not the less bitter even when concealed.—Translated from the Danish of Karin Michaelis.

MISCELLANEOUS

GYNECOLOGY IN DENMARK.

One day I was talking to a specialist about the thousands of women who are saved by medical science to linger on and lead a wretched semi-existence. These women who suffer for years physically and are oppressed by a melancholy for which there seems to be no special cause. At last they consult a doctor; enter a nursing home and undergo some severe operation. Then they resume life as though nothing had happened. Their surroundings are unchanged; they have to fulfill all the duties of everyday life—even the conjugal life is taken up once more. And these poor creatures, who are often ignorant of the nature of their illness, are plunged into despair because life seems to have lost its joy and interest.

I ventured to observe to the doctor with whom I was conversing that it would be better for them if they died under the anaesthetic. The surgeon reproved me, and inquired whether I was one of those people who thought that all born cripples ought to be put out of their misery at once.

I did not quite see the connection of ideas; but I suppressed my desire to close his argument by telling him of an example which is branded upon my memory.

Poor Mathilde Bremer! I remember her so well before and after the operation. She was not afraid to die, because she knew her husband was devoted to her. But she kept saying to the surgeon:

"You must either cure me or kill me. For my own sake and for his, I must not go on living this half-invalid life."

She was pronounced "cured." Two years later she left her husband, very much against his will, but feeling that

she was doing the best for both of them.

She once said to me: "There is no torture to equal that which a woman suffers when she loves her husband and is loved by him; a woman for whom her husband is all in all, who longs to keep his devotion, but knows she must fail, because physically she is no longer herself."

The life Mathilde Bremer is now leading—that of a solitary woman divorced from her husband—is certainly not enviable. Yet she admits that she feels far better than she used to do.—Translated from the Danish of Karin Michaelis.

THE GYNECOLOGIST.

I have conversed with many famous women's doctors, and have pretended to admire their knowledge, while inwardly I was much amused at their simplicity. They know how to cut us open and stitch us up again—as children open their dolls to see the sawdust with which they are stuffed and sew them up afterwards with a needle and thread. But they get no further. Yes—a little further, perhaps. Possibly in course of time they begin to discover that women are so infinitely their superiors in falsehood that their wisest course is to appear once and for all to believe them then and there. * * *

Women's doctors may be as clever and sly as they please, but they will never learn any of the things that women confide to each other. It is inevitable. Between the sexes lies not only a deep, eternal hostility, but the unfathomable abyss of a complete lack of reciprocal comprehension.—Translated from the Danish of Karin Michaelis.

THERAPEUTICAL HINTS

Abbott's Saline Laxative for sale at practically every drug store in the United States. The druggists are prepared to fill physicians' prescriptions for this popular effervescent laxative. This product is non-secret and is promoted ethically to the medical profession alone, therefore, it deserves, and is having, the confidence and recommendation of physicians everywhere. A 25c bottle will be sent to any physician on request. In writing prescriptions specify ABBOTT'S and you will get the best.

Hermetically sealed glass ampoules containing sterilized solutions of important drugs for hypodermic use have assumed a commanding place in medicine in a comparatively short period of time. Two or three years ago, seeing the tendency in this direction, Parke, Davis & Co. brought out a modest line of something like a half-dozen formulas, notable among them being solutions of Adrenalin, Codrenin, and Cacodylate of Sodium. From this small beginning the line has expanded until now the company announces a total of about twenty distinct formulas. The full list, we understand, is now appearing in display advertisements in the leading medical journals of the country. Physicians who are interested in this advance in hypodermic medication—and every physician ought to be—will do well to search out these advertisements and familiarize themselves with the comprehensive line of solutions therein offered.

Solutions provided by the glaseptic ampoule, it is obvious, have several advantages over those prepared in the ordinary manner. They are ready for immediate use; there is no necessity to wait until water can be sterilized and cooled. Accuracy of dose is ensured, each ampoule containing a definite quantity of medicament. The solutions are aseptic; they are permanent.

RHEUMATISM. There are few diseases in which Iodia is more serviceable than rheumatism. In some of the chronic types, characterized by the depressing

joint affections that make life a burden, Iodia will be found well-nigh specific. It relieves pain and soreness in a manner quite remarkable, and gives the patient more comfort than has been known for months. Likewise, many of the myalgic forms respond at once to Iodia, and lumbago usually clears up rapidly under its use.

Iodia does not conflict with other anti-rheumatic remedies. On the contrary, it is a powerful synergist and greatly augments the action of the salicylates and similar remedies. Iodia should be given in two two-teaspoonful doses, three or four times a day.

Svapnia

**Purified Opium
With a Fixed
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SVAPNIA possesses the following advantages over ordinary opium:

Freedom from mechanical impurities; elimination of undesirable alkaloids; definite morphine content (10 per cent); lessened tendency to nausea and vomiting; increased palatability; uniform results.

The adult dose of Svapnia (1 to 2 gr.), as well as the indications for its use, are the same as opium. It is in the form of red-brown scales, soluble in water with turbidity, and is best administered in capsules, pills or powder form.

Sold by druggists generally.

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TO ALL PHYSICIANS.

The laws of the State of California and the City of Los Angeles make the failure to report contagious and infectious diseases a misdemeanor, and provide that all contagious and infectious diseases shall be reported to the Health Department of the City of Los Angeles, and all matters pertaining to contagious and infectious diseases in the schools, or homes, shall be reported to the City Health Department. Following is a list of reportable diseases:

Bubonic Plague, Asiatic Cholera, Typhus Fever, Smallpox, Diphtheria, Membranous Croup, Scarlet Fever, Glanders, Anthrax, Leprosy, Measles, Tuberculosis, Typhoid Fever, Yellow Fever, Chickenpox, Cerebro-spinal Meningitis, Trachoma, Uncinariasis, Whooping Cough, Mumps, Dengue, Dysentery, Erysipelas, Pneumonia, Tetanus and Manila, Cuban, Philippine, Adobe or Kangaroo Itch, Anterior poliomyelitis, or Infantile Paralysis, Syphilis and Gonorrheal Infection.

A copy of full requirements can be had by applying at Health Office, City Hall Annex, Los Angeles.

Dr. John R. Elliott, Providence, R. I., submits in an article on "Empyema" (Providence Medical Journal, Nov., 1911) his conclusions regarding the effectiveness of urotropin as a prophylactic of empyema following pneumonia, based upon his experience as House Surgeon at the Rhode Island Hospital.

Of 120 cases of pneumonia occurring at that institution between November, 1909, and March, 1910, ten (or $8\frac{1}{2}$ per cent.) developed empyema, no urotropin having been given.

Of 104 cases admitted to the hospital between March and July, 1910, not a single one developed empyema, fifty grains of urotropin having been given to each adult and proportionate doses to younger patients.

In the last few months, several cases of empyema developed in the hospital in spite of the use of urotropin, but the records show that not over ten grains, three times a day, had been given. In two or three instances, through misunderstanding instructions, the whole amount of fifty grains was taken by the patient at one time without any ill effect.

Dr. Elliott believes therefore:

1. That urotropin has not been given a sufficiently fair and thorough trial in this field.

2. That in order to cause secretion of a sufficient quantity of urotropin in the pleural cavity to prevent empyema, fifty grains a day must be administered to

adult patients, the ordinary pharmacopoeial dose of $7\frac{1}{2}$ to 10 grains, three times a day, being utterly inadequate in this disease.

3. That the urotropin should be continued for three or four days after the patient has had his crisis.

4. That the continued use of urotropin in large quantities evidently does not produce any ill effects whatsoever.

A board of commissioned medical officers will be convened to meet at the Bureau of Public Health and Marine-Hospital Service, 3 B street, S. E., Washington, D. C., Monday, April 8, 1912, at 10 o'clock a. m., for the purpose of examining candidates for admission to the grade of assistant surgeon in the Public Health and Marine-Hospital Service.

Candidates must be between 22 and 30 years of age, graduates of a reputable medical college, and must furnish testimonials from responsible persons as to their professional and moral character.

Assistant surgeons receive \$1,600, passed assistant surgeons \$2,000, and surgeons \$2,500 a year. When quarters are not provided, commutation at the rate of \$30, \$40 and \$50 a month, according to grade, is allowed.

All grades above that of assistant surgeon receive longevity pay, 10 per cent. in addition to the regular salary for every five years' service up to 40 per cent. after twenty years' service.

The tenure of office is permanent. Officers traveling under orders are allowed actual expenses.

For further information, or for invitation to appear before the board of examiners, address "Surgeon-General, Public Health and Marine-Hospital Service, Washington, D. C."

FUNCTIONAL HEART DISEASES

including tachycardia, palpitation, arrhythmia and the conditions resulting from the use of coffee and tobacco are promptly controlled and corrected by the use of Cactina Pillets. Safe and free from all ill effects, the efficiency of Cactina is shown in the relief and benefit it affords.

HYDROLEINE

Made from pure Norwegian cod-liver oil emulsified after a scientific formula by approved processes.



The need of many children for cod-liver oil has been met with marked success by Hydroleine. They take it willingly; they—as well as adults—like its distinctive nutty flavor. Hydroleine is also exceptionally digestible.

While its scope of usefulness is widened by its palatability and digestibility, it is always notably dependable. Sold by druggists.

THE CHARLES N. CRITTENTON CO., 115 FULTON ST., NEW YORK

Sample with literature sent to physicians on request

Each change of season brings with it, its diseases seemingly peculiar to the time.

Summer with its intestinal disorders, sunburn, insect bites, ivy poisoning, etc.

Fall presents for the attention of the physician, its typhoid cases and Winter and early Spring, its regular quota of pneumonic, bronchial, throat and other chest conditions.

At this season, when pneumonia and bronchitis demand the call of the physician, literature presenting the experience of fellow practitioners, in the successful handling of these cases, would seem most apropos.

The Bloodless Phlebotomist for January reflects the experience of many physicians upon this timely subject.

A postal card addressed to the *Bloodless Phlebotomist*, No. 57 Laight street,

New York, will bring you a copy of the January issue.

Right living, sleeping in the open and the choice of a proper dietary, coupled with such drug therapy as may be indicated, offer the most hope to the tubercular patient who is not in position to seek another climate and lung specialists. The indications for drugs are met by Cord. Ext. Ol. Morrhuæ Comp. (Hagee), for in it are properties well calculated to soothe the irritated mucosæ, make the cough more bearable and maintain strength and resistance of the hard pressed tissues. Cord. Ext. Ol. Morrhuæ Comp. (Hagee) possesses the added advantage of not disturbing nutritional processes, as do so many agents of its class, rendering them a hindrance instead of an aid.

HOSPITAL DE HERMOSILLO.

Tengo el honor de participar al público que he abierto en Hermosillo, Méx., Calle Rosales No. 25, (cerca del Parque "Francisco I. Madero"), un Hospital Moderno, provisto de útiles y aparatos completamente nuevos, importados directamente de los Estados Unidos y de Europa. Este Hospital se llamará "Hospital de Hermosillo" y estará atendido por una administradora competente contratada en California, y servido por enfermeras recibidas en los Estados Unidos. Anexo al Hospital se encuentra una instalación completa de Rayos X y un laboratorio químico y microscópico para diagnósticos clínicos. Se atenderán con especialidad los casos que requieran tratamiento quirúrgico, para lo cual se cuenta con una sala de operaciones construida expresamente y con un nuevo y moderno arsenal. Como garantía para el público no se recibirán enfermos que padezcan enfermedades contagiosas.

DR. BIM SMITH,

El día 1º de Noviembre de 1911.

Hermosillo, México.

Teléfono 121.

CALIFORNIA HOSPITAL ALUMNAE NOTES

The regular monthly meeting of the California Hospital Alumnae Association was held on the afternoon of February 26th, at the directory rooms, 1103 West Eighth street. It was a most interesting meeting and was well attended, representing many classes of the training schools. A report of the chairman of the Sick Benefit and Relief Committee was read and received hearty endorsement. The committee, consisting of Miss Hilton, chairman; Mrs. Carson, Miss Johnson, Miss Westover and Miss Simpson, met at the latter's home on February 19th and adopted plans and regulations for the advancement of the Benefit and Relief Fund.

It sounds good just to say it: "A Benefit Fund for Sick Nurses."

We have long hoped to establish such a fund and now we feel that the hope which has been in her infancy so long

will soon be a fact, in short clothes, walking on two sturdy legs.

The fund started in contributions from four of our friends in the medical profession, and we hereby heartily thank those who responded to the cards.

One-half of the yearly Alumnae dues are also appropriated for the fund.

The dues for membership are six dollars a year, payable in advance, and it was further decreed that one must have been a member three months before being eligible to receive benefits, which are as follows:

The Visiting Committee shall be informed when a member is ill and, if necessary, remove her to the California Hospital, where we have been allowed by the management, a rate of ten dollars a week.

If the nurse is in a comfortable home and prefers remaining there with good

"overconfidence frequently begets carelessness, and as Spring approaches with its semblance of balminess so with it come those cases of Chest, Bronchial and Inflammatory Throat affections as a result of exposure from rushing the season.

That hot moist heat, most conveniently, agreeably and affectively applied in the form of antiphlogistine thick and hot, not only affords relief from pain but hastens resolution of inflammatory processes, is conceded by the sum total of clinical experience.

Chilling by exposure in frequent changing of dressings counteracts the beneficial effect of hot applications, but by the use of antiphlogistine the part may be kept for hours continuously under the influence of heat and definite results can be expected."

care, she shall be paid ten dollars weekly.

In no case will payments be made to exceed six weeks, owing to the small membership and consequently small funds.

The committee invested in a number of artistic, inexpensive book-marks to be sold by the members at the modest sum of 25 cents apiece; the profits to be deposited in the treasury.

We feel sure that all our loyal friends, the doctors, will be glad to read of the Sick Benefit and Relief Fund having been established.

How often have they seen a competent, conscientious nurse break down while caring for others, only to find upon inquiry she was unable to meet her hospital expenses.

We feel that no insurance company offers greater benefits to its policy holders than this, at the low rate of 50 cents a month.

We hereby wish to thank the unknown contributor who so kindly donated a generous sum to the fund.

Address any communications to Lilian Simpson, Secretary-Treasurer, 137 North Carondelet street.

We are pleased to announce the coming marriage of Miss R. F. Daugherty to Mr. David Happens, of Jerome, Arizona. Miss Daugherty is a graduate of California Hospital Training School. Miss Daugherty has recently been visiting Mrs. Ensign in the Monte Verde Hospital at Jerome, in charge of Dr. John Murietta. The ceremony will be performed in this city March 6th, after which the young people will take a trip to Honolulu. Upon their return they will reside in Jerome.

Mrs. W. A. Abernathy, neé Hudgens, class '07, who is living in Carrville, California, is happy in the possession of a small daughter.

Mrs. Frizelle, neé Louise Cline, is here on a visit from Oakland.

Miss Hilda Humphries, class '03, entertained a few of her friends at a de-

lightful luncheon at her home, 1450 Wright street. Covers were laid for twelve, and the place cards were very pleasing hand-colored scenes from Japan. Miss Humphries recently returned from an extended trip to Japan and China, with one of her Pomona College classmates. A most interesting and amusing description of their experiences was recounted by Miss Humphries.

Miss Hilton and Miss Simpson gave a plunge party at Bimini Baths on the morning of February 23rd, after which a luncheon was served at the home of Miss Simpson on Carondelet street. The decorations were in yellow and white.

Mrs. E. P. Durbin, class '04, was the guest of honor at a dinner given at Santa Monica by some of her girlhood friends, who have come to make their home in California, from New Jersey.

Miss Eva V. Johnson has again taken up massage and is doing very well. We know from our patients that Miss Johnson gives a very scientific as well as soothing massage.

MAN DESCENDED FROM DOGS.

Perhaps we are really descended from dogs, for the sense of smell can so powerfully influence our senses.

I would undertake in pitch darkness to recognize every man I know by the help of my nose alone; that is, if I passed near enough to him to sniff his atmosphere. I am almost ashamed to confess that men are the same to me as flowers; I judge them by their smell. I remember once a young English waiter in a restaurant who stirred all my sensibilities each time he passed the back of my chair.

Every time I bite the stalk of a pansy I recall the neighborhood of the young Englishman.

Men ought never to use perfumes. The Creator has provided them. But with women it is different. * * *—Translated from the Danish of Karin Michaelis.

SOUTHERN CALIFORNIA PRACTITIONER

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Editor,

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POTTENGER and DR. WILLIAM A. EDWARDS.

A PRELIMINARY SURVEY OF CALIFORNIA TUBERCULOSIS STATISTICS.

WM. F. SNOW, M.D., SECRETARY OF THE STATE BOARD OF HEALTH,
SACRAMENTO.

The last Legislature passed an act of particular interest to physicians and health officers throughout the state.

By this act the sum of five thousand dollars was appropriated, to be expended by the State Board of Health for the public dissemination of knowledge regarding the prevention and cure of tuberculosis, and for a special investigation of the prevalence of this disease in the State.

According to the wording of the act, this special investigation is to be for the purpose of studying "the effect of localities, employments, conditions and circumstances on the health of those developing the disease, and to determine the best means for its eradication."

Various popular ideas regarding tuberculosis in California prevail at the present time, but definite facts are largely lacking.

In order to make the proposed investigation as efficient and complete as possible, a special commission for that

purpose was appointed by the State Board, and in order that this commission might have at its disposal the latest facts concerning tuberculosis in California, so far as could be ascertained from the data at hand, a preliminary survey was made of the state mortality reports.

The survey consisted chiefly in a study of the death certificates of those dying from tuberculosis during the last five year period, that is during the period beginning with 1906 and ending with 1910, certain special tables having been worked out for the year 1910 only.

Various facts and figures were thereby developed, and will be presented here as briefly as possible.

NUMBER OF DEATHS.

In the first place, in the year 1910, there were almost 5000 deaths (exactly 4872) in California from tuberculosis alone, and this in a state where the density of population is low and the climatic conditions favorable to the absence of such a disease.

This number, 4872, was the highest for any one year of the five year period, there having been a fairly consistent increase, beginning with 4437 in 1906; rising to 4607 in 1907; showing a decrease to 4565 in 1908; rising again to 4673 in 1909, and finally to 4872 in 1910.

PERCENTAGE OF DEATHS.

The population and consequently the total number of deaths from all causes was increasing in California during this period, also, so that the percentage of deaths due to tuberculosis shows a slight decrease. In 1906, of all the deaths occurring from all causes throughout the entire state, 15.1% were from tuberculosis alone; in 1907 there was a slight fall to 14.8%; in 1908 a still further drop to 14.6%; in 1909, an increase to 15.1% and in 1910 a drop again to 15%.

We may say then that on an average tuberculosis causes about one-seventh of all the deaths in the State.

COMPARISON WITH ENTIRE REGISTRATION AREA.

A comparison with the registration area of the entire United States during this period, shows that the California figures are high. For example, of the total number of deaths for the entire registration area in 1906, only 11.3% were caused by tuberculosis; in 1907, 11.2%; in 1908, 11.3% and in 1909, 11.2%. Figures are as yet lacking for 1910.

For the four years then from 1906 to 1909, it may be seen that the percentage of deaths from tuberculosis in California was on an average of 3.6 higher than the percentage for the entire United States.

GEOGRAPHIC DISTRIBUTION.

A study of the geographic distribution of deaths in California brings out another point, which agrees with the popular impression, namely, that the percentage of tuberculosis deaths runs higher for the southern part of the state

than for the northern. This is illustrated by the following figures. If we take into consideration the country north of Tehachapi only, we find that in 1906, 12.7% of all deaths were caused by tuberculosis; in 1907, 12.6%; in 1908, 12.5%; in 1909, 13.0%, and in 1910, 13.1%, thus making tuberculosis the cause of about one-eighth of all deaths.

In Southern California, the figures run a little higher. In 1906, tuberculosis caused 21.6% of all deaths; in 1907, 20.1%; in 1908, 19.8%; in 1909, the same, 19.8%, and in 1910, 19.2%, or about one-fifth, the percentage in the south showing a slight decrease, and that in the north a slight increase during this five year period.

A summary statement then of the above figures shows that in California as a whole, one-seventh of all deaths are due to tuberculosis; in northern California only one-eighth of all deaths are due to tuberculosis, while in southern California as many as one-fifth are due to this cause alone.

LENGTH OF RESIDENCE.

This naturally brings to our minds the question of length of residence and statistical evidence on this point is not wanting. Considering the five year period for the whole state, we find that 32.1% of tuberculosis victims during that time had resided in this state for less than 10 years; 25.3%, for 10 years, or over; 29.4% for life, and 13.2% were unknown. Moreover, as many as 9.6% of tuberculosis deaths were of people with less than one year's residence in the state.

LENGTH OF RESIDENCE IN SOUTHERN CALIFORNIA.

This question of length of residence is of especial interest for Southern California, and the figures for that section of the State differ somewhat from those just given for the State as a whole. If we consider the section south of Tehachapi only, we find the percentages of

short residence to be much higher. In this region during the five year period, 55.9% of tuberculosis victims had resided in the State for less than 10 years; 18.8% for 10 years and over, and 16% for life, with 9.3% unknown. A further analysis of the deaths for this section reveals that 18.8% had resided in the State for less than 1 year, and 12.7% for less than six months.

Statistics show then that for the past five years many of the deaths from tuberculosis have occurred among persons of relatively short residence in the State, and that this is especially true for the South.

COMPARISON OF URBAN AND RURAL.

Another point of interest to the statistician is the comparison of the percentage of tuberculosis deaths in urban and in rural districts. Such a comparison in California shows that in the freeholders' charter cities in 1908, there were 2620 deaths from tuberculosis or 15% of the total deaths; in 1909 there were 2598, or 14.9% of the total deaths; and in 1910, 2840, or 15.2%.

For the State outside of the charter cities on the other hand, tuberculosis numbered 1945, or 14.1% of the total deaths in 1908; 2075, or 15.4% in 1909, and 2032, or 14.8% in 1910.

These figures show then that the per cent of deaths from tuberculosis is slightly greater within cities than in the rural districts.

PERCENTAGE OF DEATHS IN SOUTHERN CITIES. (See Table 1.)

The percentage of deaths in certain of the southern cities is indeed surprisingly high. Only the figures for 1910 for five of the more important of these cities will be mentioned here now, though others are available. Of all the deaths occurring in the city of San Bernardino in 1910, as many as 31.0% were caused by tuberculosis alone. In Pasadena in the same year, 22.7% were due to that disease; in Riverside, 22.6%; in Los Angeles, 18.4%, and in

San Diego, 18.1%. For San Bernardino, Riverside and San Diego, this figure is higher than for the preceding years; for Los Angeles and Pasadena it is lower.

LENGTH OF RESIDENCE IN SOUTHERN CITIES. (See Table 2.)

Here again must be mentioned the length of residence figures, for the percentage of imported cases in these cities is correspondingly high. In San Bernardino in 1910, while it is true that 31% of the deaths were from tuberculosis, yet at the same time we must remember that out of that 31%, a large number of the persons dying had lived in the State for less than 10 years; indeed, as many as 60%; and 20% had lived here for less than one year. The figures for the other cities bear out the same conclusion, namely, that while southern cities have an abnormally high percentage of deaths from tuberculosis, they, at the same time, show an equally high percentage of imported cases.

Such figures are particularly enlightening for Los Angeles, where in 1910, 11.1% of tuberculosis victims had resided in the State for less than six months; 5.7% for less than three months, and almost 2% for less than one month.

SEASON OF GREATEST MORTALITY. (See Table 3.)

After having considered, then, *how* many tuberculosis deaths occur in the State, and *where* they tend to concentrate, the next question to suggest itself is *when* they are most frequent. Is there any one time or season more favorable than another to an increase in the number of tuberculosis deaths? A satisfactory answer to that question can not be given at present, except for the year 1910. During that year, statistics point to February as the fatal month with March and April ranking next, while during October there are fewest deaths. This concentration of deaths during the first few months of the year is particularly true for the southern part of the State.

RACE MORTALITY. (See Table 4.)

Another question for which a few percentages were worked out for the year 1910, was that of race mortality. In considering this question it is suggestive to note that a comparison of the relative causes of death for the different races to be found in California, shows that while typhoid ranks high for the Japanese, and tuberculosis low for that race, this is reversed for the Negroes, Chinese and Indians, all three of which show a relatively high tuberculosis mortality.

It might be mentioned here that a letter recently received from a central California physician stated that in his opinion tuberculosis was a serious problem amongst the Hindus of his section, many cases being brought into the community by the laborers of this race.

RATE PER 100,000 POPULATION.

As regards the general tuberculosis death rate per 100,000 population for California, the figures on the whole show during the five year period, a decrease as follows: for 1906, the rate was 218.1; for 1907, 216.8; for 1908, 206.0; for 1909, 202.6, and for 1910, 203.3. It would be valuable at this point to make a comparison with the rate given by the census reports for the entire registration area and for certain other States, but just at this time it is not possible to make such a comparison fairly, since the census figures are based on the estimated population, and California having had a remarkable increase in population during the past 10 years, shows therefore on the estimated basis, a death rate much too high.

TUBERCULOSIS MORTALITY FOR CERTAIN AGE PERIODS. (See Table 5.)

Another point on which the statistics furnish evidence is that of the relative mortality for different age periods. By tabulating the deaths according to the age of the decedent, it is shown that the highest percentage, almost one-half

(45.9%) of those dying from tuberculosis in California last year, were between the ages of 25 and 44. This at once suggests the importance of the economic loss to the family and the State which must naturally be the result of such a large number of deaths at this active and productive period of life.

In Southern California the concentration of deaths for the period from 25-34 years is notably great. It has been suggested that this is due to the fact that the immigrants to that section are largely young and it is to this class that a great number of the cases are due, as we have already seen.

A further study of age periods shows that the percentages for males and females are somewhat different. In 1910 the deaths of males from tuberculosis between the ages of 15 and 24 numbered only 11.8%, while deaths of females for this same period numbered 21.4%. Between the years 25 and 34 the number of deaths for females still ranked higher, being 27.4% as against 24% for males. Between 35 and 44, however, this is reversed, for then we find the higher percentage among the males, 22.3% against 17.4% for females. This shows then that for tuberculosis the concentration of deaths of females occurs between the ages of 15 and 34, while that for males is between 25 and 44.

MARITAL CONDITION. (See Table 7.)

The 1910 figures in this preliminary survey were also segregated according to marital condition of decedents and bring out the fact that for the population of fifteen years and over, tuberculosis numbers more victims amongst single men (50%) than among married men (36.4%), but that for women, this ratio is reversed, 55.2% being married as against only 30.4% single.

Other tables and figures along this line have been made for 1910 and will be worked out completely for the preceding years and for 1911, but the facts just stated will serve to illustrate the

general type of points brought out by such segregations.

OCCUPATION MORTALITY.

There is one more study to be mentioned in this connection, and that is the comparative number of deaths occurring in different occupations. Such figures can mean very little, however, until we have the new census reports on occupations and can establish the death rates on this basis. As the figures themselves stand, however, we find the following to be true.

Out of the 4872 deaths returned for tuberculosis in 1910, occupations were reported for only 2633. Of these 2633 persons reported as gainfully employed, 7.3% were engaged in professional service; 10.7% in clerical and official occupations; 6.3% in the mercantile and trading employments; 2.2% were classed under public entertainment (by which is signified hotel, boarding-house, saloon and restaurant keepers); 4.5% were engaged in police, military and personal service (the latter comprising barbers, janitors and launderers); 26.3% were servants and laborers, excluding agricultural laborers; (In passing it might be noted that a conspicuous number of those classified as servants were specifically designated as *cooks*.) 20.2% were engaged in the manufacturing and mechanical industries; 22% in agricultural and other outdoor occupations, which include farmers, miners and steam railroad employes, and finally, 5% in all other occupations.

According to the reports handed in then, the three classes of occupations claiming the greatest number of victims from tuberculosis in California are the manufacturing and mechanical industries, with 26.3%; the outdoor industries with 22%, and the servant and laboring class with 20.2%. As stated before, however, these figures can have little significance until the number employed in each class is known. In regard to the outdoor industries, it would

also be necessary to know the length of time the decedent had been employed in the specific industry reported, as one, of course, surmises that many enter such occupations after becoming victims of the disease,

SUMMARY.

A brief summary, then, of the facts thus far gained from the California tuberculosis statistics shows:

First, that in 1910, California suffered its greatest recorded loss from tuberculosis, having almost 5000 deaths.

Second, that compared with the entire registration area of the United States, California has a high percentage of deaths from tuberculosis.

Third, that this percentage is higher for Southern California than for Northern.

Fourth, that a large per cent of the deaths occurring in this State are the result of imported cases.

Fifth, that the number of these imported cases is greater for the South than for the North.

Sixth, that the percentage of deaths is slightly higher for the urban than for rural districts.

Seventh, that the percentage of deaths is especially high in Southern California cities.

Eighth, that the number of imported cases is also especially high for such cities.

Ninth, that the greatest number of deaths occurred in February; the smallest in October.

Tenth, that as regards the non-Caucasian population, the Indians, Negroes and Chinese seem especially susceptible, and the Japanese less so.

Eleventh, that the great bulk of the deaths occur between the ages of twenty-five and forty-four.

Twelfth, that of the population over fifteen years of age, the percentage of deaths is higher for single males and for married females.

CONCLUSION.

In conclusion it may be stated again, that the work here outlined is merely a preliminary, suggestive study. A part of the tables are founded on the five year period, but the others are for 1910 only. There are still various facts to be gained, such as those concerning the duration of illness, the parentage of the

decedents, and the location of short residence cases.

It is the hope of the State Tuberculosis Commission to include in its final report, a complete statement of all the evidence to be furnished by the mortality statistics of California for the five year period beginning with 1907, and ending with 1911.

Table 1. Per cent of deaths from tuberculosis to total number of deaths for certain southern cities, 1908-1910.

	1908	1909	1910
San Bernardino.....	26.3	26.4	31.0
Pasadena.....	30.3	24.6	22.7
Riverside.....	21.1	21.4	22.6
Los Angeles.....	18.7	18.5	18.4
San Diego.....	17.8	15.5	18.1

Table 2. Per cent of tuberculosis deaths by length of residence for certain southern cities, 1910.

	Under 1 year.	1 to 9 years.	10 years and over.	Life	Unknown
San Bernardino.....	20.0	40.0	17.5	7.5	15.0
Pasadena.....	24.2	42.1	21.0	11.6	1.1
Riverside.....	14.0	53.0	8.0	20.0	
Los Angeles.....	15.8	43.3	20.0	15.1	5.8
San Diego.....	16.9	41.9	22.6	12.9	5.7

Table 3. Per cent of total deaths from tuberculosis ranged by months, 1910. (Actual number of tuberculosis deaths for each month given below.)

Jan.	Feb.	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.
16.0	17.2	16.6	16.5	16.2	15.0	1.33	14.7	12.9	12.5	15.2	14.2
(478)	(452)	(460)	(426)	(453)	(377)	(349)	(377)	(306)	(337)	(418)	(429)

Table 4. Per cents of deaths from all causes, typhoid and tuberculosis for different races.

	Whites	Negroes	Indians	Chinese	Japanese
All causes.....	94.7	1.3	0.5	2.1	1.4
Typhoid.....	93.1	.6	.4	2.1	3.8
Tuberculosis.....	90.9	2.2	1.0	4.1	1.8

Table 5. Tuberculosis deaths classified by age periods, 1910.

Total number deaths.....	4,872	(100 %)
Under 1 year.....	148	(3.0)
1 - 4 years.....	187	(3.8)
5 - 14 ".....	142	(2.9)
15 - 24 ".....	735	(15.1)
25 - 34 ".....	1,227	(25.2)
35 - 44 ".....	1,006	(20.7)
45 - 54 ".....	699	(14.3)
55 - 64 ".....	407	(8.4)
65 and over.....	321	(6.6)

Table 6. Per cents for tuberculosis deaths classified by age periods for males and females, 1910.

	Males.	Females.
Total number of deaths.....	3,193	1,679
Per cent under 1 year.....	2.7	3.7
" " 1 - 4 years.....	3.0	5.4
" " 5 - 14 ".....	1.8	4.9
" " 15 - 24 ".....	11.8	21.4
" " 25 - 34 ".....	24.0	27.4
" " 35 - 44 ".....	22.3	17.4
" " 45 - 54 ".....	16.9	9.6
" " 55 - 64 ".....	9.9	5.4
" " 65 and over.....	7.6	4.8

Table 7. Marital condition, 1910.

	Total.	Single	Married	Widowed	Divorced	Unknown
Male.....	2,952	1,477 (50 %)	1,074 (36.4 %)	182 (6.2 %)	44 (1.5 %)	175 (5.9 %)
Female.....	1,443	438 (30.4 %)	797 (55.2 %)	173 (12.0 %)	15 (1.0 %)	20 (1.4 %)

EARLY DIAGNOSIS OF TUBERCULOSIS.*

J. A. PARKS, M.D., "PARKHURST," LA MESA, CAL.

This is a day in which pathology and clinical medicine are working so effectively together, that the recognition of pulmonary tuberculosis should not be postponed until the disease is in the advanced form. To the physician of to-day, the diagnosis of tuberculosis means practically its early diagnosis, and my few remarks will be directed towards the discovery of the trouble in its incipiency. As a rule when the disease has reached the advanced stage its discovery makes no great demand on our skill, and the physician who hopes to be of greatest service to his patient **must** remember that his results are in exact proportion to the **earliness** of his diagnosis, and must be prepared to recognize the trouble in the very beginning. I do confess that such a diagnosis is often a difficult task and calls for the most careful clinical work, but with modern methods and improved medical education, we should in the majority of cases diagnose the trouble and not depend on the specialist.

There is only one pathognomonic sign or evidence of Pulmonary Tuberculosis and that is the tubercle bacilli, but facts established by three distinct procedures, if carefully studied and interpreted, will justify a positive diagnosis. First, a careful history; Second, a physical examination; and Third, an intelligent study of the symptoms and clinical course of the case for a sufficient length of time, reinforced by the tuberculin test. It is hard to estimate the value of a carefully prepared history. F. Wolf goes so far as to say that the history of the case is more valuable than a physical examination, but in my judgment this is not true, but it will nearly always prove that the patient's trouble began long be-

fore he thought himself sick and gives information as to sources of infection that is valuable. The immediate family history is of paramount importance: whether or not the father or mother has or had tuberculosis, or possibly of more importance whether or not a sister or brother has or had tuberculosis, for out of 350 cases tabulated by myself, I found the father tubercular in 25 cases, the mother in 31, both parents in 5, a sister or brother in 70 cases and a negative history in 190 cases. Therefore, this individual record shows a greater degree of infection in families where one of the children is tubercular, than in families where the parents are infected, not considering the inherited tendencies that would naturally be transmitted from tubercular parentage. The childhood history must not be neglected since we are taught that the majority of children are infected before they are six years old. Otitis, Media, Pneumonia, Pleurisy, Pertussis, Scrofula, Bronchitis, Measles and the child's general health must be carefully gone into. The personal history of the adult often shows the chances of infection in the workshop, office or store where the abominable practice of promiscuous spitting is permitted, also it reveals obscure past sicknesses such as malaria, typhoid fever, neurasthenia, dyspepsia, or the occurrence of ischiorectal abscess and repeated pleurisies which are generally tubercular in nature. The patient's habits and occupation are of great value, and we should record the weight, appetite, sleep, etc., for future comparison. As a rule, the present history is not neglected, but often the past. We must find out the real **beginning** of the trouble, for in the majority of cases

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there have been repeated attacks of fevers, pleurisy and general malaise prior to the attack severe enough to call for the family physician.

There is no one physical sign alone that is conclusive proof of Tuberculosis. neither is there any one physical sign that is conclusive proof of appendicitis, for every sign is produced in many other diseases. Therefore we come to a positive diagnosis by synthesis—by bringing together all the evidence gathered by the history. Exhaustive study and intelligent diagnosis cannot be over-estimated—snap diagnosis is criminal in a case so important.

INSPECTION.

If carefully done, will in a large number of cases suggest important features such as deformity, flat chest, wide intercostal spaces, delicate skin, condition of the hair, slight flush of one cheek, condition of the pupil, Thompson's red lines of the gums, varicosities, possibly drooping of the shoulder on the affected side, which is given as an early symptom. The apex beat of the heart more rapid, inspiration increased, and at this stage expansion of the chest over the affected lung possibly limited, especially on deep breathing. Careful inspection of the bare chest suggests further investigation which is imperative for early diagnosis, and for this reason, I urge careful inspection.

PALPATION.

Opinion varies materially as to the value of palpation, but since the sign of muscular rigidity and thickening of the muscles over the affected area offered by Dr. Pottenger, palpation is of greater interest to me. I will not discuss his sign at length, but refer you to his article in reprint. By palpation we may find increased vocal fremitus in many of the early stages, depending on whether or not the irritation is confined to the bronchi or touches the

deeper structure of the lung tissue. Increased vocal fremitus on the left is of more importance than on the right; the skin may be unnaturally dry and warm. The apex beat of the heart is located, and I consider tachycardia of great importance in the earlier stages, and the pulse should be carefully studied.

PERCUSSION.

We do not expect changes as early as we do from auscultation, but careful and light percussion is of great diagnostic value many times in very early cases. We do not expect dullness, but a short or slightly higher pitched note, or in many cases a slight tympany appears very early. Percussion directly over the clavicle is very important as well as above and below the clavicle; posterior, between the scapula and spinal column.

AUSCULTATION.

Is recognized as the most accurate and delicate of all physical diagnostic measures, and is pre-eminently worth most of all physical tests in the early diagnosis of tuberculosis. The first and most constant evidence of diseased lung tissue is a prolongation of the expiratory murmur, and harshness in some degree in the respiratory sound. I believe I am safe in saying that increased vocal fremitus is an accompaniment of these modifications, but often masked by physiological differences that may naturally exist, as well as a thickened pleuri that may often complicate. In delicately constructed chests, so often met with in women, this symptom is exaggerated. Increased vocal fremitus associated with abnormal resonance, and fine crackling crepitant rales at last of a feeble inspiration is sufficient to warrant a positive diagnosis, especially so when found in the apices, which is the most favorable site and location for tuberculosis to begin. The sounds are not so positive diagnostically as rales, but

they appear much earlier as a rule, and justify a positive diagnosis when associated with suspicious symptoms and signs, and we need not wait for adventitious sounds in the lungs. Often it is almost impossible to describe the respiratory changes technically, but there is an indescribable difference and we should not be satisfied until we harmonize the two sides. Klebs order of change in the breath-sounds are

- (1) Rude or granular breathing, chiefly on inspiration.
- (2) Feeble breathing.
- (3) Cogwheel breathing.
- (4) Harsh vesicular and prolonged expiration.

Transmission of the heart sounds to the right apex is a sign of incipient consolidation or thickening of the lung tissue. The laryngeal examination in early cases is of great value, but we realize that primary tuberculosis of the larynx is rare. In suspected cases, a discovery of a thickened and reddened mucous membrane of the posterior commissure, a swollen, reddened arytenoid, a slight reddening of the cords or congestion of the ventricular bands is enough to warrant positive diagnosis. The fluroscope is of great value in the early diagnosis of bronchial gland enlargement, and there is no doubt in my mind but we would often secure valuable information if we would resort to the x-ray in competent hands.

SYMPTOMS AND CLINICAL COURSE.

Fever as a rule is not recognized by the patient, but a slight rise of temperature is the most constant symptom in Pulmonary Tuberculosis, while not conspicuous in the glandular form of the disease. Whether due to the toxins thrown out or to the amount of irritation and inflammation is disputed, but each surely plays its part, for there are two distinct types of fever, first a toxic or inflammatory, and secondly, a septic type, but the

last is diagnostic within itself and it is the first we want to consider. In the beginning of slight involvement of one or both apices, the temperature is quite moderate and often has to have some assistance in its real incipency to bring it to light. Normal as a rule until after luncheon, with usual rise of 2.5 to one degree in the afternoon, usually dropping to normal by 6 p.m., without some unusual excitement mentally or physically or sitting in an over-heated room. The pre-menstrual temperature must not be forgotten. I know of no other condition that produces a pre-menstrual temperature so invariably as does Pulmonary Tuberculosis. It has been my observation that mental application of an exciting nature, such as a game of cards, heated discussion, especially after meals, produces a greater rise of temperature than the same amount of physical exercise. Too, it has been my observation that the assistance of some class of mental disturbance often brings to light an unstable temperature. I consider flushing of the face in the afternoon and often a feeling of high temperature without a rise of more than one-fifth as rather characteristic, and especially so if flush confined to cheek of the affected side. Absolute rest may produce a normal temperature, but on action the same slight rise manifests itself. Generally during the incipient stage, the general health is more or less disturbed: there is usually some disturbance of appetite and faulty digestion—patient feels tired or is easily fatigued on exertion, loss of weight and generally some signs of anaemia, and almost always an abnormal condition of the blood. But it is well to remember that there are exceptional cases that are devoid of many or all the above symptoms, and the physician in such cases must rely wholly on auscultation and other means of making his diagnosis. Gen-

erally, there is more or less cough, but occasionally there are cases that only complain of a rough sensation in the throat, but hacking cough is easily excited by repeated slight colds: such cases should have often and thorough microscopical examination of the sputum, which will possibly clear up the diagnosis when other measures fail. We all have seen patients in apparently good health, who are peculiarly susceptible to colds associated with slight rise of temperature, which does not attend ordinary colds of such severity, and in many of these cases it is impossible to make a positive diagnosis from physical signs. First, our suspicion is aroused partially on account of repeated colds and slight fever, possibly on account of family history, and here it is our duty to make repeated and careful search for tubercle bacilli. Chills in the early cases are rare unless the process is very acute, then they are of more value in suggesting the nature of the cause. Langor and malaise is a very common symptom and a very important one, and is too often explained as malaria, indigestion and over-work.

Anorexia and digestional disturbances when combined with other symptoms, adds weight to our evidence, for tuberculosis often manifests itself as dyspepsia with all forms of gastrointestinal disturbances combined with wasting and fatigue. Ischiorectal abscess and chronic otitis media should always suggest tuberculosis. Klebs states that sweats are very rare, only occurring once in his practice as an early symptom.

Emaciation is an important symptom and should call for careful investigation, and doubtful cases of persistent hoarseness or clearing of the throat suggest a laryngeal and bronchial irritation and demands a thorough laryngeal and pulmonary examination.

Pain is not of great diagnostic value, but should always demand our attention, for rheumatism of the shoulder, at times, means apical pleurisy, and pain in the shoulder on coughing is suggestive. A sensitive apex is often found in early cases and a heavy sensation and even a warm sensation beneath the sternum and upper chest is often complained of. Expectoration is practically worthless in the majority of truly early cases, but when present, we should make repeated and thorough examinations for the T. B. for in tuberculosis of the bronchial glands, the T. B. are found early, and often before the lung tissue is involved.

HEMORRHAGE OR HAEMOPTYSIS.

To my mind hemorrhage is one of the most conspicuous symptoms. Some authors go so far as to say that every case of hemorrhage should be diagnosed as tubercular in origin, if no other justifying cause can be found. Whether or not this be true, hemorrhage is one of the most suspicious symptoms and demands thorough investigation, for the early or congestive type of hemorrhage often occurs previous to the advent of tubercle bacilli in the sputum, or any physical signs. Of course, there are innocent sources of haemoptysis, but the old story of "Hemorrhage from the Throat" is misleading and often conceals important truths, and I believe the percentage of errors would be small if we were to class all such hemorrhages, no matter how small, as tubercular in origin when associated with signs and symptoms of pulmonary trouble, provided a careful examination revealed no evidence of the blood coming from the upper air passages. I confess there are innocent sources of blood-spitting, and just here it seems well to mention some of the important and frequent sources of haemoptysis. The capillaries may become distended or over-distended and rupture from intense hyperaemia, as in severe bron-

chitis, mitral obstruction and regurgitation, or excessive action of the heart from hypertrophy or stimulants. Rupture of capillaries from weakness of their walls in hemorrhagic diathesis (haemophilia) scrofula, rickets and chronic interstitial nephritis with hypertrophy of left ventricle and brittleness of arterioles throughout the body. Vicarious bronchial hemorrhage sometimes takes the place of the

menstrus, but Page says such women are usually tubercular. Ulceration from mediastinal tumors and thoracic aneurism also cause blood spitting.

If with the above signs, symptoms and clinical history, we are not satisfied with our diagnosis, then we should resort to the tuberculin test in some of its varied forms, which I mention only to bring it out rather than prolong the paper.

THE NAUHEIM BATHS.*

BY E. AVERY NEWTON, M.D., AMERICAN PHYSICIAN PRACTICING AT BAD NAUHEIM, GERMANY.

First, a few historical points regarding Bad Nauheim may be of interest. Bad Nauheim is situated north of Frankfurt on the Main, on the north-eastern slope of the Taunus Mountains, 460 feet above the sea level. These springs have been known for centuries and are thought to have at some time been in the possession of the Romans, as the remains of old boundary walls are still to be found near the springs. It is not known whether these walls were built by the Romans or the Teutons. The first documentary evidence of Nauheim is during the thirteenth century. A later document, dated 1457, shows that there was a guild of salt makers, who had been in existence for many years.

The first bath-house at Nauheim was built in 1835 and contained nine baths. In 1850 another bath-house was built with thirty-two baths, and two years later another of the same size was built. This house still stands and is in use. Until 1857 the baths in common, with all other then existing Carbonic-acid Saline Baths, were used for the treatment of rheumatic and gouty affections and disorders of a pelvic nature in women.

In 1857 Prof. Beneke, then Dr. Beneke and instructor at the Marburg University, was called to Bad Nauheim by the authorities to practice in the summer. Two years later, 1859, he wrote a treatise on the benefits of the Nauheim baths in cases of cardiac affections. In 1861 he wrote further on the benefits of the baths in cardiac conditions and showed what had heretofore been considered a contraindication to the taking of the baths, i. e., that in diseases of the heart, instead of the baths being harmful in any way, the cardiac condition was benefited by the bath treatment. Among his patients that season he found eight cases of chronic heart disease and all of them were benefited by the baths. In 1870 Beneke reported more fully, and only after this time did patients with heart disease come to Nauheim in any numbers and solely for cardiac affections. In 1872 Beneke reported 101 cases and gave a detailed account of fifty-five of them. Again in 1875 he wrote another article, and, if we examine all his works on the subject, we find Beneke draws attention to four main points in the Nauheim Treatment of Heart Disease.

First: The removal of rheumatic

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tendencies, whereby relapses of acute rheumatism, which would increase the existing cardiac lesions, are prevented.

Second: The effect of these baths being to promote absorption, he believes that as they cure other productions of rheumatic inflammation, so will they be beneficial to the cardiac valvular apparatus.

Third: He found that the baths always had a soothing effect upon the heart action in rheumatic patients, as well as in those without any rheumatic affections.

Fourth: In many cases of old valvular diseases he found marked improvement in compensation, as well as considerable benefit to the general state of health, which can, also, in many cases be obtained by other means than the Nauheim baths, but which were obtained by a course of baths when every other known method had failed in some of these cases.

To Prof. Beneke, his work and writings, is undoubtedly and indisputably due the credit of having discovered the benefits to be derived from the use of these baths in cardiac conditions and at the same time of having introduced a new remedy for the treatment of heart diseases. Thus the work of the late Augustus Schott, Prof. J. M. Groedel, the late Prof. H. N. Heineman, Dr. Besley Thorne, and many others, have only elaborated on the facts first laid down by Prof. Beneke.

The Nauheim Baths have a much larger field in the treatment of cardiac and vascular diseases—also diseases secondary to this condition, and diseases of the nervous system, than has been recognized by the medical profession generally heretofore.

The most important reason for apparent failures, or only slight help from the Nauheim Baths, either at the Springs or by the artificially prepared baths, is the fact that patients are given every other kind of treatment un-

til they all fail, then as a last resort are sent to Nauheim, or given a course of baths, usually by a nurse who may have heard of Nauheim Baths, but usually has not. When physicians find their patients suffering from congestion in different groups of muscles (usually diagnosed as rheumatism) with some slight failure of compensation, high blood pressure, constipation, or cases which have had an infectious fever, or some local infection and the myocardium is thereby weakened and the patients do not recuperate as they should, showing that there is still a toxemia in the circulation or tissues, if they would then have them take a course of Nauheim Baths, properly given, then the Nauheim Baths would be used much more than they are and the benefits to be derived from their use would be much better known. These patients are usually given salicylates, until their digestion is badly upset and they gradually run down physically, until they get a dilated heart with marked failure in compensation, and then braced up with digitalis until they have no further power of recuperation and the stomach is further impaired by the constant use of digitalis, then they are thought to be ready for a course of Nauheim Baths. In most of these cases, even after all this treatment has proved unsuccessful, they are improved by the baths, showing that had the baths been used earlier a greater degree of improvement would have resulted or, quite likely, a complete cure effected, as all symptoms of failure of compensation, rheumatic pains, etc., often disappear in many such patients after a course of baths.

As to the number of baths necessary for a cure, that depends entirely upon the condition of the patient. Some patients being more responsive to the treatment necessarily require fewer baths than others. There seems to be no way of telling this except by the giving of the baths and watching their

effect. I have seen cases in which ten or twelve baths were more effective and produced a greater improvement than in other cases where thirty or more baths were given. Many patients with a very weak heart muscle cannot stand the water at full strength, nor more than half the amount of water usually used; in other words, they have to be given the baths of half strength, one-half Nauheim water and one-half plain water, then gradually the Nauheim water increased until full strength is used. In some cases only a sitz bath is given, or the tub half filled. I have treated a number of cases, which during the entire course of baths have never had the water higher than the waist line—only the legs and hips immersed, in which there were good results, showing that the effect of the bath is general and not local.

The temperature of the bath also depends upon the condition of the patient. In patients with high blood pressure, as a symptom of their condition, you want the relaxing effect of the warm baths, while in patients who are let down and relaxed and with a low blood pressure, the cooler and more stimulating baths are indicated. I usually begin the treatment with a temperature of from $33\frac{1}{2}^{\circ}$ C. to 35° C. (92.3° to 95° F.) and raise or lower the temperature according to the indications, which is observed by watching the affect of the bath in each case. Cases which seem very much alike often respond very differently. Sometimes the relaxation is very marked after only three or four baths of only a few minutes duration, while others only relax after from ten to fifteen baths of from fifteen to twenty minutes duration. I refer here to cases in which relaxation is sought. The duration of the baths is from five to twenty minutes—occasionally longer, and this can only be told by carefully watching the effects of the baths on each individual patient. In my work at Nauheim I have

a trained attendant to accompany each and every patient to the bath; the attendant notes the effect of the bath generally and takes the pulse two or three times during immersion. If there is any post-sternal pressure, or pressure in the waist line (these two conditions are very common during the first few baths) then some of the water is let out—enough to relieve the discomfort. If during the bath the pulse rapidly increases, or if the lips and extremities become blue, they are taken out of the bath at once. To have an attendant accompany the patient is very necessary in my opinion, as patients when sent by themselves to the baths are apt to be nervous and not know whether the symptoms are of sufficient magnitude to warrant them getting out of the tub before the time prescribed elapses.

The baths cannot be taken every day; in some cases not more than a bath every other day, while in others two on successive days may be taken, with a day's rest between, and in other cases three, or even four, in succession may be taken, so that there can be no set rule or rules as to the number of baths, strength of the bath, or the rapidity with which they can be given.

The different kinds of Nauheim baths used are:

First: Solbad, or Plain Brine Bath.

Second: The Termalbad, or Thermal Bath, which is, the water from the springs which has been lying in open reservoirs.

Third: The Thermalsprudelbad, or Thermal Effervescent Bath, which is the water carried to closed tanks underground and in which only a small percentage of the carbonic-acid gas has been allowed to escape.

Fourth: The Sprudelbad, or Effervescent Bath. The water used for this bath flows directly from the earth into the tub.

Fifth: Strombad, or Current Bath. This bath is given by allowing the water

to run in and out of the tub during the entire bath and requires from 10 to 15 times as much water as the other form of baths.

During the bath the patient's pulse usually gets slower and fuller and this is a guide as to the length of the bath. If they are allowed to remain too long in the bath the pulse will become more rapid and less in volume. This condition shows you that the duration of the bath has been beyond the beneficial period. Quite often you get no diminution of the rate nor increase in volume during the bath and it only occurs after the patient has been resting for some time after bathing. The patient should rest from an hour to an hour and a half, and dozing is not harmful, but deep sleep is to be avoided, as you are apt to get too much relaxation. If the patients feel chilly after their bath it is a good plan to give them a glass of warm milk or broth. It is not uncommon to get a reduction in the pulse rate of from 4 to

20 beats per minute. I have seen this reduction in rate in patients who had been reclining for an hour or more when the pulse was taken before a bath, and also in patients whose pulses were taken in bed after a night's rest.

There seem to be two distinct and widely varying opinions as to how the heart is benefited by the baths. One opinion is that the heart is stimulated directly through the nervous system. The other is that the effect of the baths is to relax the peripheral blood vessels, allowing a freer flowing of the blood through these vessels of small caliber and in this way lessen the force required of the heart to supply blood to the tissues. I myself believe in the latter theory, having so often seen patients, who before a bath have a pale skin and rapid cord-like pulse, change to a healthy glow while in the bath and the pulse become slower, softer and fuller, the patient changing from a feeling of nervousness and irritableness to a state of composure.

THE RELATIONSHIP OF ADENOIDS AND ENLARGED TONSILS TO DEFORMITIES OF DENTAL ARCHES, MAXILLARY BONES AND ADJACENT BONY STRUCTURES.*

BY DR. JAMES DAVID MCCOY, PROFESSOR OF ORTHODONTIA, UNIVERSITY OF SOUTHERN CALIFORNIA.

Mr. President and members of the Eye, Ear, Nose and Throat Section: The evil effects of Adenoids and enlarged tonsils are so well understood by you all that it seems almost presumptuous for me to attempt to enter into a discussion of any phase of the subject. But as one who has reason to appreciate the good work of the Rhinologist, I would like to call your attention to some of the baneful results of these conditions, and show you how seriously they must be considered by the Orthodontist.

The fact that we find most cases of marked arrested development in the

dental arches and maxillary bones associated with tonsillar (pharyngeal or faucial) disease and kindred conditions is well established. I believe, however, comparatively few realize to what an extent these deformities may develop and how far reaching is their effect.

The deformities which we will discuss may be considered under two general headings:

First. Those where the mandible protrudes. These cases, for the most part, I believe, are associated at their beginning, at least with the disease and enlargement of the faucial tonsils.

Second. Those where there is a narrowing of the upper dental arch, with the mandible under-developed and occupying a position distal to normal (weak chin effect) giving the individual the appearance of having a pronathious upper jaw. These are by far the most common and are primarily, at least, associated with mouth breathing.

The degree of deformity in either of the foregoing types varies, and depends upon the age and susceptibility of the individual and the length of time the cause has been active. In both types the normal occlusion of the teeth is lost, accompanied by impairment of mastication deglutation and speech, and in exaggerated cases, the facial contour is marred to a serious degree.

In considering the first named type of deformity, i. e., where the mandible protrudes, we have one which is less frequent than the second named, but equally difficult to overcome when once established. While the etiology of this type includes a number of causes, the one which is undoubtedly the most common and productive of the most exaggerated results, is the enlargement of the faucial tonsil. I do not mean to say that there are no cases of enlarged tonsils in which the occlusion of the teeth is not correct, for such a statement would not only be sadly lacking in proof, but ridiculous on its very face.

The faucial tonsil, as you know, lies on the superior-constrictor of the pharynx, and between the palato-pharyngeal muscles, behind, and the palto-glossus in front. When diseased, it may grow inward, upward or forward. It is the forward growth which I believe has a direct bearing on the beginning, at least, of this class of deformities. The forward growth of the tonsil brings it in contact with the posterior part of the mandible, and the mandible is moved unconsciously forward, and held there involuntarily, aided by reflex muscular action both of the tongue and the adja-

cent muscles. The result brings increased space around the inflamed tonsil and relief from pressure. Relief is also obtained by projecting the tongue into the side to which is attached the palto-glossus muscle, which composes the anterior part of the fauces, and which is to a considerable extent carried forward with it, thus giving more room for the swollen gland. But to project the tongue and still keep it within the mouth, the lower jaw must also be projected, and this malposition of the jaw, when maintained for months and perhaps years, inevitably becomes permanent and is exaggerated as time goes on, by the perverted forces of the occlusion of the teeth. These cases are termed progressive, for where the occlusion of the teeth is lost there is nothing to prevent the lower jaw from very gradually coming forward, even though all the causes have been removed. This is easy to understand, when we consider the fact that the "forward movement" of the mandible is one of its easiest movements; and when the restraining influence of the teeth is removed there is nothing to hold it back, except the glenoid fossa, which probably becomes enlarged anteriorly.

The accommodation of the other structures of the face to the altered position of the mandible renders this deformity one of the most unsightly and distressing to which the human face is subject.

It is a clinically established fact as stated before, that when we have the high arched palate and constricted upper arch, that adenoids or other inflammatory or obstructing agents are present or have left the evidence of their previous existence. It does not necessarily follow that a child when first observed at five, seven or ten years of age has no adenoids, that it had none before. The old impression that children may outgrow these conditions has some truth in it, but they (adenoids) leave their mark, nevertheless, and frequently the

child will have all the marks of deformity of the jaw and accompanying defects that go with adenoids, and yet the adenoids themselves will have disappeared. Some of these cases, therefore, where these deformities are found, and in which a careful rhinological examination shows no adenoids, are by no means proof that they are not the most frequent and important cause of this type of arrested development of the jaws.

We know that the development of the bones of the face is dependent upon the eruption of the teeth and their subsequent use, upon the normal use of the nose in breathing, and upon the anterior development of the cranium. The teeth, we have noticed, are "preformed" in the gums. Their size and form represent the true evolution of the individual. Adverse environmental conditions cannot change the teeth, but can only act upon the surrounding tissue. A slight change in the surrounding bone structure may produce mal-locking teeth, which in itself becomes an instrument to modify and further unbalance the forces of development. The form and size of the teeth are such that they are in harmony with the bones of the face that nature has intended the individual to have. They are so formed and arranged as to best resist the strain to which they would in normal occlusion be subjected. Any change in the bone that disarranges the position of the teeth, disarranges the mechanics of occlusion, which in turn is reciprocated into the developing bones and results in entirely different bony structures than were intended.

Inspired and expired air are powerful factors in the development of the bones of the face and the accessory sinuses. In the normal breather the mandible is raised by the elevators and the teeth brought into normal occlusion, and as the act of swallowing is performed, the tongue expresses the air from between itself and the roof of the mouth, the lips

are sucked down upon the teeth, the lower lip binding over the lower edge of the upper incisors, the tensor and levator palati having raised the soft palate, it is then allowed to drop upon the dorsum of the tongue, shutting off the oral cavity. The teeth just drop apart from occlusion, and the mandible is suspended by atmospheric pressure, and the muscles of the cheek and lips are in repose. In normal respiration there is an exchange of air in the accessory sinuses, and the veins are emptied at the base of the brain. In swallowing, the tensor and levator palati open the orifice of the Eustachian tube and the exchange of air is made in the middle ear.

Now let us consider the mechanics involved when the nose is occluded from any cause, and it becomes necessary to open and use the mouth for breathing. All the muscles that depress the mandible are attached on the inner side of the horizontal ramus of the mandible, with each inspiration the muscular pull is a backward one upon the mandible, which, in time, causes the bone to modify and brings the lower teeth distal to normal. After the muscles have locked the molars in this distal relation, all the lower teeth that are to erupt at a later period must assume a similar distal malrelation, and the mechanics of this malocclusion is constantly operating to mould and alter the bones in accordance to its needs.

The vacuums above described are not created, consequently the tongue is not sucked tightly against the palate, and we have a non-widening of the upper arch in consequence. The lips are not drawn against the teeth, and the upper lip is so little used that it exerts but slight influence on upper anterior teeth, while the lower lip instead, binding over the lower edge of the upper incisors turns outward, and on account of the malrelations of the two arches, the lower lip is forced in between them and becomes a factor in pushing the upper anterior teeth further forward. The

bones of the face are now subjected to a perverted mechanical action of mal-locked teeth, to perverted muscular action due to the altered functions of the mouth and nose, and to the altered mechanics of having the air pass through the mouth instead of the nose. The bones are consequently moulded into entirely different structures than were intended for the individual, in response to the altered mechanics. The nose and accessory sinuses present an entirely different appearance due to their altered functions. There is a resultant asymmetry of the bony structures, and a pathological condition of the soft parts.

In our treatment of these cases, it would seem logical, if our premises are correct, to establish at the earliest moment the normal forces that are operative in the normal breather.

1st. The nose, naso pharynx and throat must be cleared of any obstruction or disease, and 2nd, the teeth must be placed in normal occlusion and the lips lengthened, if necessary, so as to allow the mandible to be suspended by atmospheric pressure, maintained by the tongue and lips. An approach to normality not only in the nose, but also in the mouth, must be made before the true normal respiration can be established. Again if the premises are correct, that the bones of the face are altered by the perversion of the forces of development due to the mal-locking of the teeth and altered respiration, we can only expect an approach to normality if these unbalanced mechanics are made right at an early age.

In conclusion I would emphasize these points: 1st, that the teeth, tongue and lips are important parts of the respiratory apparatus, and as such they never have been given sufficient consideration.

2nd. That he who attempts to correct the types of dental and jaw deformities described without the co-operation of the Rhinologist, does his work in vain.

3rd. That in the treatment of some cases for the establishment of normal respiration by the Rhinologist, the Orthodontist may be of great service.

It would seem, in fact, that in some instances we might well adopt for our slogan the old familiar motto, "United we stand, divided we fall." The Rhinologist has rendered invaluable help to me many times, and if my specialty can serve him I shall rejoice and be glad.

In the preparation of this paper the following authors have been consulted and in some instances directly quoted:

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Dr. Frederick Henry Gerrish, "Text-book of Anatomy."

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Dr. Royal S. Copeland, "Proceedings of the A. S. of O., 1902."

A CASE OF ADVANCED PULMONARY TUBERCULOSIS.

BY H. F. BOATMAN, M.D., LOS ANGELES, CAL.

Formerly of the staff of the Independence State Hospital, Iowa.

Case of Mr. E. H. F., a farmer, who came from Southern Minnesota to Los Angeles on account of his chest condition. He is 53 years old, married, his

wife and 5-year-old son being in perfect health.

Family history: Father and mother lived to the age of about 70 years, both

dying of pneumonia. One sister died of gastric carcinoma at the age of 40. Patient says that one sister has tuberculosis. Two sisters and four brothers are now living and well.

Past history of patient: He had been very strong and well practically all his life up to the onset of the present illness, being always accustomed to an active, outdoor life. About two years ago he developed an obstinate cough, accompanied by pleuritic pains. His cough continued and he developed night sweats and evening fever, and suffered from loss of appetite and failing strength. His loss in weight amounted to 25 pounds, and he had had repeated hemorrhages during the eight months past. He had been attended by five different physicians during his illness, none of whom told him what his condition was, but the physician last in attendance advised him to come to California, which he did, arriving in Los Angeles on Oct. 8th, 1911.

Condition on Oct. 14th, 1911: On this date I was called to see the patient, and found him presenting the following symptoms and signs: Constant and severe pain in chest, principally on right side, aggravated by coughing. Patient was coughing almost continuously, raising large amounts of thick, yellowish sputum, and having profuse night sweats. Appetite practically nil; bowels somewhat constipated; temperature 102.5; pulse, 104; respiration, 28; weight, 145 pounds, his average weight having been 170 pounds; weakness marked.

Inspection of chest showed depression of right supraclavicular space, and deficient respiratory movement on right side. *On palpation*, there was exaggerated vocal fremitus over upper part of right lung. *Percussion* elicited well marked dullness on right side, extending down as low as the 5th rib. Also slight dullness in left supraclavicular region. *Auscultation* showed numerous moist rales, large and small, over dull areas,

and slight pleuritic friction sounds in right infraclavicular space. *Microscopic examination* of sputum proved it to be absolutely loaded with tubercle bacilli. A few staphylococci and streptococci were also present. Heart and kidneys were normal.

Diagnosis: Advanced 2nd stage tuberculosis of right lung and beginning involvement of left apex.

Treatment: I attended to his immediate needs with both internal and local medication, and put him on a reconstructive tonic treatment. I had the patient moved to a cottage in the outskirts of the city, where he arranged sleeping quarter on a porch, and I gave him the usual instructions in regard to habits, hygiene, mode of life, diet, etc.

He received his first injection of Dioradin on Oct. 22, 1911, and a daily injection thereafter up to ten doses. Then I gave the injections on alternate days till Dec. 2, 1911, when I discontinued treatment until Dec. 13, on which date I started him on a second similar series of injections. He has had up to the present time 49 injections. The injections were nearly all given in the buttocks, using an all metal hypodermic syringe and an extra long needle. The skin surface was cleansed with alcohol and ether. Syringe and needle were washed with alcohol before and after using, thus preventing clogging and insuring asepsis.

Results of treatment: Patient started to gain after the first two weeks of treatment, and has been improving steadily since. There has never been any pain at the point of injection, nor has there been the slightest untoward systemic effect. He has gained 11 pounds, his appetite has improved, and his night sweats have entirely disappeared. The evening temperature is now often normal, and is seldom above 99.4. His strength is increasing, and he sleeps well, coughing only two or three times during the night.

His chest soreness is gone, and examination shows that the lesions are not growing larger. The sputum still contains tubercle bacilli, but in greatly reduced

numbers. Patient is still under treatment, and is now gaining about two pounds per week in weight.

508 Auditorium Building.

MERCURY—ITS DISCOVERY.*

BY HIERONYMUS FRACASTOR (1483-1553).

As a fact, the action of mercury on the scourge is marvelous, either because its natural affinity for heat and cold renders it proper to absorb the devouring fires of the disease; or, because its surprising density permits it to divide and to dissolve the humors for a reason that is analogous to that which gives to incandescent iron a caustic action more marked than that of a light flame; or, that its mobile and penetrating molecules, apt to infiltrate themselves in the warp of tissues, have the power of pursuing and consuming even to the bottom of organs the impure yeasts of the disease; or, finally that its magic virtues are derived from some occult force whose mystery escapes us. But, I stop, for before all I must here state how that remedy was revealed to men by a divine hand, and celebrate in my verses this good deed of the gods.

In a valley of Syria, shaded by the luxuriant foliage of willows and cut by the murmuring waves of Callirhoe, there formerly lived, it is said, a husbandman named Ilceus. He divided his tranquil life between the labors of his field and the cultivation of a garden consecrated to the gods of the field in which grew through his care gallingate, the cassia tree, and perfumed ginger. Suddenly, O horrors! he was struck by the terrible scourge. The unfortunate man, in his distress, called the heavens to his aid: "Ye gods that I adore," he cried, "have pity on my torture. And thou, beneficent Callirhoe, thou who always

curest our ills, do not forget that but a few days since I made an offering to thee, on the trunk of an oak, of the carcass of the deer that had fallen under my blows. Powerful divinities, if your clemency delivers me from this awful disease which tortures me night and day, my grateful hands will not cease to load your altars with crowns and flowers. From this time on my most pleasing violets and my whitest lilies go to you; to you the budding roses and the first hyacinths of my humble place." He spoke and fell back exhausted on the grass.

At that time Callirhoe was bathing herself in a neighboring grotto. She heard his prayer and those vows. She at once answered Ilceus by the caressing murmur of her limpid waves which flowed upon the moss of the rocks. She then sent him sleep to assuage his pains; and, whilst he was resting in peace beneath the fresh shade of the willows, she appeared to him in a dream, arising from the bosom of the waters, and said:

"Ilceus, at last the gods, in answer to my prayers, have taken pity on thee, but, alas! the remedy, the only remedy, that may cure thee of thy ills, thou shalt hunt in vain in this part of the world that the Sun lights with his rays. Such in fact is the inexorable chastisement which has been visited upon thee by Diana and her brother, Apollo, the very day that thou didst pierce with thy arrows the sacred deer of whose

*Abstracted from Hieronymus Fracastor's *SYPHILIS* from the original Latin. A translation in prose of Fracastor's *Immortal Poem*. The Philmar Co., St. Louis, Mo. Hieronymus Fracastor, poet, scholar and philosopher; professor of logic in Padua; born 1483, died 1553.

carcass thou didst make an offering to me. Diana saw thy victim panting upon the ground and bathed in blood; she saw thy fatal trophy suspended on one of the oaks of the neighboring forest; and in her grief she cursed thee! It is she and the son of Latona, excited against thee by the anger of his sister, who have afflicted thee with a horrible disease, and both have sworn that everywhere in which their empire extends thou shalt find no remedy for thy sufferings. There remains for thee, as the only resource, to seek thy safety in the bowels of the earth and the darkness of the infernal regions. Listen! Under a neighboring rock, a dark cavern opens and it reveals to the eyes of mortals a dense forest of oak trees; a horrible chasm, which is terrifying, in which the cedar with plaintive murmurs alone troubles the eternal silence. Let the next sunrise see thee there, immolate a black sheep and offer it to Cybele, burning cypress and thuja in honor of Erebus, of the shades and of the unknown divinities of Tartarus. Thy prayers will be heard, and a nymph will come offering herself to thee as a guide for thy steps in the dark roads which lead to the center of the earth. She, herself, will also point out to thee the remedy that thou implorest. Take courage! And do not believe thyself to be deceived, at this time, by the illusion of a dream. Look, recognize me! I am Callirhoe, the Nymph friend, whose waters fecundate the fields which thou dost cultivate." She had spoken and at once plunged in the blue waves.

Ileus awakes, "intoxicated with joy." "Beneficent goddess," he cries, "I accept thy presage, I will obey thee; I will go, divine virgin, whither thy voice calls me!"

The next day, at the earliest streak of dawn, he proceeded to the cavern. He found its entrance under immense rocks which the tree of Jupiter has

covered with its branches. On the threshold of the chasm, he immolates a black sheep which he offers as a sacrifice to powerful Cybele. Then, he burns the thuja and the cypress in honor of Erebus and of the divinities of the dark shores. Suddenly there arises a voice which overthrows the subterranean echoes; it is the sacred voice of the goddess!

The nymphs of the earth who preside over the metals, were occupied at that moment in uniting liquid sulphur with the silvered wave of mercury, a marvelous amalgam which, hardened by the bath, transforms itself into pure gold. All ready, for this divine work, unknown to mortals, and they alloyed a hundred rays of flame and a hundred molecules of burnt air with two hundred germs, borrowed either from the bowels of the earth or the bosom of the waters. When the voice of Cybele resounded, seized by a religious alarm, they suspended all their labors, and one of them, detached herself from her companions, and approached at once the entrance of the cavern. It is the nymph Lipara to whom is confided, in the dark empire, the task of purifying by fire, gold, silver and the sacred bitumens. Addressing Ileus: "I know," she told him, "thy name and thy misfortunes; I know the design that brings thee here. Be without fear. It is not in vain that a goddess beloved by us has promised thee our help. The remedy that thou seekest is here. Come, follow me in these dark paths which lead to our domain; the nymph who is speaking to thee will guide thy footsteps." At these words she crossed the threshold of the cavern. Ileus followed her without hesitation. What a picture then unrolled itself to his eyes! There were here gaping gulfs, there some subterranean rivers, at other places bottomless abysses filled by eternal night. "We are here," says Li-

para, "in the empire of Earth. Several divinities have divided among themselves these darksome places. Under our feet extends the kingdom of Prosperpine; on its arches are the sacred springs from which pour the rivers which then roll their thundering waves to the sea. For us, this is our domain. My sister and I make bronze, silver and gold. It is I who guide through the torn sides of this mountain the threads of sulphur whose beneficent vapor mingles itself with the water of thy sweet friend, Callirhoe." However, they continue their walk in the midst of the darkness, and soon they begin to hear the muffled sounds of the subterranean braziers, the crackling of flames excited by the sulphur and the shaking of the bronze which is slowly boiling. "We now approach," continued the nymph, "where Cybele brings forth those metals which so markedly excite the envy of mortals. A thousand goddesses, daughters of the earth and of night, inhabit these dark homes and there consecrate themselves to tasks without number. The one distributes the water; others dig the earth to gather the sparse germs of flame and of fire; others, finally compose the metallic alloys, which they subsequently pour into molds or which they harden by tempering. The narrow path which thou seest on our left leads to the arsenals of the Cyclops of Etna, who are incessantly hammering iron on the resounding anvils and whose forges belch far away on the earth whirlwinds of smoke. Finally this other road to the right will lead us to the sacred river whose metallic waves carry quicksilver and will furnish thee the remedy, the only remedy that is good for thy disease."

They then entered the avenue whose arches garnished with tutty are traversed by threads of gold and of sulphur of scintillating reflections. Then they ar-

rive at the banks of a river with silvery waves. "Ileus," says the nymph, "thou hast finally reached the end of thy troubles. When that sacred stream has passed over thy body three times, thou shalt be delivered of thy disease and its impure poison." At these words, she plunges her virgin hands into the river; three times she takes out of it the liquid metal and three times she spreads it on the limbs of Ileus. O prodigy! It is done! The disease at once disappears, and his hideous covering, on contact with this glowing flood, dissolves and disappears in a moment!

"Now leave," continued Lispara, "go find the day, the pure sky and the fortunate regions that the sun lights. But let thy first care be to offer a sacrifice to Diana, to the gods of these gloomy places and to the goddess who has saved thy days."

She has spoken and resumes the road to the cavern. Ileus follows her, intoxicated with gratitude and joy; he soon passes the threshold of the darksome empire and sees again the radiant clearness of day.

Renown immediately seized this prodigy, and soon the sublime virtues of mercury were known throughout the universe.

At the beginning, mercury was employed associated with lard; later it was combined with the turpentine of Epirus and with the resin of the majestic birch. Certain physicians today combine it with horse fat or bear's grease, or bdellium and with the juice of cedar, others with myrrh, with male incense, with mibium and with burning sulphur. For my part, I prefer to alloy it with a mixture of black hellebore, orris root, galbanum, asafetida, oil of mastic, and oil of native sulphur.

Patients, a truce to the disgust which may be caused by this remedy! For if it is disgusting, the disease is still more so. Besides, your cure is at this price.

So, without hesitation, spread this mixture on your body and cover with it your entire skin, with the exception of the head and of the precordial region. Then, carefully wrap yourself in wool and tow, then get into bed, load yourself with bed covering and thus await until a sweat bathes your limbs with an impure dew. Ten days in succession renew this treatment, for ten entire days you are to undergo this cruel trial whose beneficial effect will not cause you to wait.

As a matter of fact, very soon an infallible presage will announce to you the hour of your freedom. Very soon you will feel the ferments of the disease dissolve themselves in your mouth in a disgusting flow of saliva, and you will see the virus, even the virus, evacuate itself at your feet in rivers of saliva.

If, during the course of this treatment, small ulcers develop in your mouth, have a care to fight them with gargles of milk or by a decoction of pomegranate privet. This treatment being completed, you may then, without fear recall Bacchus to your table and enjoy in full liberty the generous nectars of Phetia, of Falernum and of Chios.

The disease thus subdued, a last and very simple matter remains for you to carry out in order to complete your victorious work. It is that of purifying your body of the last taints by means of ablutions, for which lavender, marjaram, rosemary, verbena and clary offer you their perfumed odors.

licentiate of the Hongkong College of Medicine for Chinese. Subsequently he continued his medical work abroad, and received the degree of M.D. from the University of Edinburg. Dr. Sun, who is now forty-four years of age, has not devoted himself extensively to practice, but has for the past ten years identified himself with movements of political reform in his native country.

It is of course as yet too soon to judge the probable outcome of affairs in China, or to determine the importance of the part played in them by Dr. Sun. It is interesting, however, to observe a physician apparently prominent in the enlightenment and emancipation of what to the occidental mind seemed perhaps the most conservative and reactionary of all existing aboriginal civilizations and governments. These events may have an important bearing on the future of the medical profession in China. For some years the medical missionaries have become increasingly prominent in the awakening of Oriental peoples to the spirit and meaning of modern western civilization, and have possibly done more than any other class to instill a realization of its advantages by the exemplification of their work. It is significant that Dr. Sun's rise to power has come just at the time of the projected establishment of the Harvard School of Medicine at Shanghai, whose possibilities of growth and service may thus become unexpectedly and rapidly augmented.—*Boston Medical and Surgical Journal.*

DR. SUN AND THE MEDICAL FUTURE OF CHINA.

Sun Yat Sen, who has lately become conspicuous as a leader of the revolution in China, and has recently been elected president of the new Chinese republic, is a physician. After obtaining his preliminary education in various foreign countries, he began the study of medicine in China under an American missionary, Dr. Kerr, and became the first

Charles Dickens' Youngest brother, Augustus N. Dickens, to whom the novelist gave the endearing name of "Boz," came to this country as a newspaper man first at Amboy, Ill., and later as a merchant in Freeport. He died in Chicago, 1866. Of his three surviving children one son, Bertram A. Dickens, is a Methodist preacher, a member of Rock River Conference since 1884.

SOUTHERN CALIFORNIA PRACTITIONER.

A MEDICAL, CLIMATOLOGICAL AND SOCIOLOGICAL MONTHLY MAGAZINE.

This journal endeavors to mirror the progress of the profession of California and Arizona.

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EDITORIAL

A CHANGE IN CONTROL.

The Southern California Practitioner, with this issue, passes into the Editorial control and Proprietorship of Dr. G. E. Malsbary, Suite 501 Auditorium Building, to whom, hereafter, all communications, both in regard to business and scientific contributions, should be addressed.

Dr. Malsbary is author of the well-known work on the Diagnosis of Syphilis, and of a text book on the Practice of Medicine, and monographs on the "Treatment of Tuberculosis" and "Septic Infections," and various other subjects. Besides this, he is author of the sections on Meningitis and Cerebro-Spinal Meningitis in "Wood's Reference Hand Book of the Medical Sciences." Dr. Malsbary is a member of the Academy of Medicine of Cincinnati, and has lived in Los Angeles for almost two years. I have

reason to believe that he will put new life and energy into this, our local Medical Journal and will make it a far greater factor in the scientific progress of Southern California and the Pacific Coast in the future, than it has ever been in the past.

THE SOUTHERN CALIFORNIA PRACTITIONER was founded in 1886. I had the control of it for about five years, and then Dr. H. Bert. Ellis and Dr. F. D. Bullard were the Editors and Proprietors of it for eleven years, at which time it again came into my control. Now after ten years it passes into the control of Dr. Malsbary. This Journal is needed. It fills a place. I want to urge the medical profession of this section of the United States to get behind Dr. Malsbary and help him in every way possible. It will be my pleasure to assist him as opportunity offers, and he should have the hearty co-operation of the profes-

sion. The best way to begin this co-operation is to send One Dollar for a year's subscription. There is no physician but can do that much. NOW is the time.

WALTER LINDLEY.

OUR AIM.

It is customary for the new editor of a publication to announce any policies he may expect to follow. In the present instance, there will be no marked deviation from the path followed for more than a quarter of a century, by the eminent predecessor of the present incumbent. It will be our aim to encourage whatever is worthy of our support. This statement is so general, almost stereotyped, that we will try to make our position more clear by enumerating some of the things we believe worthy of support.

Of course, we favor the establishment of a national bureau of health, as comprehended in the so-called Owen's Bill.

Requisite pure-food laws should be enacted and impartially enforced, as a means of conserving the public health. The medical profession should be more active in suggestions along this line.

The time has come when California should reciprocate with states having a standard as high as we maintain, provided the applicants have actually met requirements as stringent as those exacted in this state. That is to say, no well educated, reputable physician should be excluded from practice wherever his services may be required.

But we are absolutely and emphatically opposed to pseudo-physicians, quacks and charlatans, in whatever guise they may appear. The activity of such

individuals is a menace to public health. As to the so-called Christian Scientists, we believe many of the adherents of this sect are really sincere Christians at heart, but we have never known one who could reasonably be considered a scientist. Osteopathy, like the various evanescent phases of sectarian medicine, has added nothing to the science and art of our profession. Sometimes we may be impatient, but, "as for the truth, it endureth and is always strong; it liveth and conquereth forevermore." No irregularism or pathy can supplant the regular practice of medicine, and none has materially added to our store of knowledge. Incidentally the term "allopathy" no more applies to the regular practitioner than the term "homeopathy," and its use in this sense should be considered an insult to our profession.

In medical education, the highest possible standard is none too low. To this end, the requirements for practice within the state should be made more stringent, so that the number admitted shall be no greater than is needed for the conservation of the health of the people.

We should be known as leaders in the conservation of the public health. The cordial relation between the laity and the profession should be maintained and cultivated. The education of the laity along hygienic lines is important. The people are ready for such instruction, and we would be derelict if we neglected this opportunity to do good.

All medical advertisements should be subjected to as careful supervision as drugs and foods. This applies to both the lay and professional press. As soon as practicable, we shall have our own

advertising pages ideal in this regard.

It will be our endeavor to maintain the prestige of the SOUTHERN CALIFORNIA PRACTITIONER as the leading medical magazine west of St. Louis and the best local medical monthly extant. Will you help? We need not only your subscription, but also your contributions to medical literature, that this journal may continue to be the chief depository of medical lore in this region.

TWENTY-SIX YEARS OF THE SOUTHERN CALIFORNIA PRACTITIONER.

The following letter from a well-known physician explains itself. If you can help him, write us, 501 Auditorium Building:

I have been a subscriber of your journal, the SOUTHERN CALIFORNIA PRACTITIONER, for fifteen years, or more, and have been pleased to read it.

As you know, I am making a collection of literature which relates to Arizona and as your journal covers this field, in a medical way, I wish to procure and have bound a complete set of the SOUTHERN CALIFORNIA PRACTITIONER, if I may. I have a file of my journal since 1905, but in looking it over I find that it is lacking many numbers. I write to ask if there would be any possibility of procuring the first ten volumes complete and odd numbers for the balance of the time, such as I am lacking. I will be glad to pay your price and am anxious to procure a complete set of your journal for my library of Arizona.

An early reply will be appreciated.

CONCERNING THE RELATION OF BOVINE AND HUMAN TUBERCULOSIS.

In their bearing upon the question of testing dairy herds with tuberculin, upon which a vote may soon be taken in Los Angeles, some recently reported statistics are of so great importance, that every effort ought to be made to bring them to the attention of the general public.

Koessel (Deutsch. Med. Wochenschr., 1911, xxxvii) reports 709 cases of pulmonary tuberculosis with the following analysis: 305 American, 252 European, 152 Japanese. Of these, 705 were caused by human tubercle bacilli; 2 by bovine certainly, 1 by bovine probably, 1 by bovine and human types.

In the Journal of Medical Research, 1911, xxv., Park and Krumweide make the following report:

In infants and children, 6 to 10 per cent of all deaths due to tuberculosis are due to bacilli of the bovine type, and most of the cases of cervical adenitis and abdominal tuberculosis of children are caused by bacilli of the same type.

In other than primary tuberculosis in adults, bovine tubercle bacilli are associated with 3.6 per cent of the cases of cervical adenitis; 22 per cent of those of abdominal tuberculosis, and 3.5 per cent of the cases of joint tuberculosis.

In view of these facts, the cows in every dairy herd should be regularly tested with tuberculin, and the infected animals killed.

E. W.

CHRONIC FOCAL INFECTIONS IN THE MOUTH AND THROAT.

Careful clinical observers have for a long time believed that chronic infections in the mouth are the predisposing cause of many acute rheumatic, or rheumatoid, attacks in the throat and other organs of the body. The fact of such a relationship may be said to be abundantly established, and the only uncertainties concern the forms of germs involved, and whether a general term can be used in describing the condition.

Davis (Journal A. M. A., 12-30, 11, p. 2169) uses the terms hemolytic streptococci, and *streptococcus mucosus*. He says he rarely found pneumococci in secondary attacks except in cases of valvular endocarditis, but the other forms were present in arthritis and other diseases of the general class here mentioned.

Goadby (Practitioner, London, January, 1912) reports an experimental investigation of the relation between diseases of the mouth and rheumatism in which he calls the germs he found *streptobacillus malac*. He says that in 172 cases of rheumatoid arthritis Lambert found badly decayed teeth in 141.

Victor Greer Best (Dublin Journal of Medical Science, February, 1912) asserts that pyorrhea alveolaris can be cured by persistent use of autogenous vaccines prepared from the organisms in the patient's mouth. He mentions *streptococcus conglomeratus* and *Diplostreptococcus rheumaticus* as the germs commonly found.

In a recent symposium on this subject at a meeting of the Chicago Medical Society reports and comments were made

by the most prominent medical men and dentists of that city. In that conference there was unanimous acceptance of the assertion that the chronic foci mentioned are directly responsible for acute attacks of tonsillitis, chorea, endocarditis, arthritis, nephritis, appendicitis, neuritis and myalgias. The practical deductions to be drawn are two: Careful search should be made for these chronic foci, and when found the recovery of some of the secondary attacks may be hastened by the use of autogenous or stock vaccines, and their recurrence may be prevented by correcting, or curing, the conditions in the mouth and throat.

The importance of these facts demands careful attention on the part of internists. In all cases in this class the examination of the mouth and nasopharynx should be made by those expert in such work.

E. W.

THE ROLE OF THE TESTICLES AND OVARIES IN DEVELOPMENT OF SEXUAL CHARACTERISTICS.

In separate articles in the *Centralblatt für Physiologie*, 1910 and 1911, Steinaeh has reported some experimental transplantations of testicles and ovaries, and their results upon the sexual character of the rats and guinea-pigs operated upon, which, if confirmed by subsequent workers are epoch making in their interest and importance.

In the early youth of the animals, he transplanted the organs mentioned into muscular regions of the castrated animals of the same and of the opposite sex; testes into castrated males and fe-

males, and ovaries into castrated females and males.

He reports successful growth of the organs in their new positions and hosts, and also characteristic sexual development. In castrated males, under the influence of transplanted testes masculine traits developed and under the influence of transplanted ovaries feminine characteristics developed. In females under analogous conditions corresponding results were observed. That is to say, castrated female rats and guinea pigs re-

tained, or developed, feminine characteristic traits and body forms if ovaries were transplanted in their bodies, and masculine traits if testes were implanted in them. If confirmed, this report opens up extremely interesting possibilities in connection with pelvic surgery in women, in the way of delaying a premature menopause in such cases, but just as the coming of summer is not assured by the appearance of one swallow, so these statements of Steinach must await confirmation.

E. W.

EDITORIAL NOTES

RECIPROCITY.

It is reported that a bill is to be presented before the Legislature, by Dr. William F. Snow, Secretary of the State Board of Health, advocating reciprocity in the practice of medicine and surgery. The Doctor was East, under a special commission from the Governor of this State, and attended several important conferences. We are in favor of reciprocity, provided the reciprocating State has as high a standard as that maintained in this State. The greatest danger to the State lies in the admission of pseudo-physicians rather than in the number of reputable well educated physicians admitted to practice.

CARNEGIE REPORT.

The sixth annual report of the Carnegie Foundation furnishes more food for thought. It lists twenty-two unworthy medical schools that have passed out of existence during the past year, unable to withstand the light of publicity. Incidentally, we note that it shows that poor schools still turn out three times as many lawyers as the country needs. We have sometimes thought it would be a good plan to establish competitive examinations for practice, admitting to the prac-

tice of medicine only as many as are needed to conserve the best interests of society.

RESIGNATION REFUSED.

Mayor Thum, of Pasadena, very justly refused to accept the resignation of Dr. Stanley P. Black. We are rather glad the incident occurred, but regret that the moral of the occurrence has not received more publicity. The physician should be held culpable who would neglect to quarantine a suspicious case, as he would an undoubted case of smallpox, until he is certain that it is not smallpox. We believe Dr. Black did right. And the Mayor proved his metal by not being unduly influenced by irresponsible anti-vaccinationists.

PELLAGRA.

We are in receipt of a reprint from Public Health Reports, No. 65, on The Salient Epidemiological Features of Pellagra, by C. H. Lavinder, Passed Assistant Surgeon, United States Public Health and Marine Hospital Service. The paper contains much in the way of epidemiological data regarding pellagra, and emphasizes the incompleteness of these data. The author concluded the

monograph with a plea for more complete information regarding the prevalence of pellagra. The disease, unfortunately, is not considered reportable, and the number of cases among us is unknown. Such information must come largely from the individual practitioner; and it is to be hoped that the importance of reporting pellagra may not be overlooked.

The tuberculosis building at the Soldiers' Home is completed. This is an annex to the hospital.

Dr. J. J. Brownson of Dubuque, Iowa, limits his practice to Operative Gynecology and Surgery.

The C. V. Mosby Medical Book and Publishing Co. of St. Louis have just issued Roberts' Work on Pellagra.

Dr. Conrad Deichmiller is now located in the Union Oil Building, corner Seventh and Spring streets, Los Angeles.

Mrs. Horatio Walker, Jr., graduate of the Toronto General Hospital, has taken charge of the Good Samaritan Hospital, Los Angeles.

Dr. H. E. Stroud of the Lankershim Building, Los Angeles, recently fractured his right arm while endeavoring to crank his car.

A sanitarium is being built for Dr. W. J. Geiereman at Altadena. The structure is a four-story building of reinforced concrete.

Dr. D. Granville MacGowan will build a handsome residence on West Adams street, facing Eighth avenue. It is said that the building will cost \$40,000. Sounds good.

Dr. John Henry Trout, of No. 913 San Rafael street, Glendale, died the evening of March 19th. The Doctor was one of the founders of the Sun Drug Company, of which he was vice-president. He was Coroner in 1902. The cause of death was tuberculosis.

Dr. C. C. Valle, of San Diego, acting assistant surgeon in the Public Health and Marine Hospital Service, has been appointed health officer at the Tia Juana port of entry, to examine all aliens coming into the United States. This appointment is in line with numerous others made along the Mexican boundary.

The San Bernardino County Medical Society held its regular meeting March 20th, at the Physicians' club rooms. The paper of the evening was by Dr. W. B. Power, on "Regeneration of the Nerves." Dr. G. G. Moseley reported an interesting case of abscess of the liver. In addition, several clinical cases were presented.

The regular meeting of the Health Officers' Association of Southern California was held March 16th, at San Pedro. Quarantine was the chief subject discussed. After the meeting, the members partook of a fish dinner at Point Firmin, as the guests of Dr. William A. Weldon, the health officer of San Pedro. The next meeting will be held in Pasadena early in May.

Dr. A. Claude Magee, police surgeon, has had his salary increased from \$50 to \$100 per month. We are glad to record this action, but cannot refrain from stating our belief that the salary is still too small. The Doctor reported making 47 emergency calls in one month, besides 26 surgical operations, and used his own automobile. But then, did you ever know of a medical man receiving an adequate salary for public service?

The Children's Hospital Clinic of the Los Angeles Parent-Teacher Association's Federation celebrated its first anniversary March 21st, at the headquarters, Alpine and Castelar streets. During the year, more than 1200 patients have been treated. Dr. Ross Moore spoke on "The Adolescent Child," and addresses were also delivered by Charles N. Waddell of the State Normal School and Prof. George L. Leslie, head of the

health and development department of the public schools.

Dr. Frank Thomas has been appointed district physician for the district south of Seventh St. and east of Main, vice Dr. W. A. Bailey, who recently resigned.

It is reported that \$700,000 may be expended by the government in establishing a quarantine station on Dead Man's Island in San Pedro harbor. It is estimated that such an arrangement will be called for in order to take care of the Panama Canal immigration. Any quarantine regulations and provisions that may be made necessary by the opening of the Panama Canal should not be unduly delayed.

Dr. P. C. Remondino, of San Diego, returned home March 6th after a six months' European tour. The Doctor divided his time between the study of the different systems of medical education and the selection of material for forthcoming works on various phases of art.

Dr. H. Bruce McDaniel swore to a complaint March 6th, charging Dr. J. A. McNaughton, president of the Physicians' Hospital Association, with a misdemeanor, because of a refusal to permit an examination of the books of the Association. Dr. McDaniel claims an assessment was made against the stock of the association without the consent of the majority of the stockholders. It is not often we hear of a physician suing a physician.

One of the most despicable characters in society is the human vulture who makes a business of illegal operating. It is unfortunate that such individuals are so often known as "doctors." As a matter of fact, they are executioners rather than physicians. Last month a "doctor" Mead was arrested, following the death of an eighteen-year-old victim, and it is alleged that he admitted having performed more than 400 illegal operations since November, 1910. Mead engaged his offices at No. 455 South

Broadway, the latter part of May, 1908. He hung out a sign bearing the legend "Occult Seer and Astrologist," and made no pretense of practicing medicine at that time. It was not until several months later that he changed his line of business, the supposition being that he could not make occultism and astrology pay. Owing to the numerous advertising signs he had hung through the halls of the building where his offices are, other tenants complained. About a year ago the real business of the man was called to the attention of Attorney Morrow. A little of the history of this individual is interesting; too much would be nauseous.

FOR RENT—Office; cheap office, to regular physician. Apply to Dr. Malsbary, 500 Auditorium Building.

THE PHYSICIAN AND THE PUBLIC.

The Sun (New York) well expresses our sentiments. Though citing the Connecticut statutes, those familiar with the California statutes will understand the application to conditions in this State. It seems difficult for the laity, especially the Legislatures, to recognize the altruism of the medical profession; and it certainly would be calamitous if that profession were to cease to be altruistic. The following is from *The Sun*:

It may be profitable to consider in an impartial manner the prevalent unfairness of the public toward the physician. The public may be defined as the people who elect and send to the Legislatures men to give expression to their ideas upon all subjects legislated upon. The physician may, for the present purposes, be defined as the man or woman who has complied with the State's regulations for the practice of medicine, no matter what sectarian designation he may bear. Accepting these definitions, it is not difficult to demonstrate that the attitude of the former toward the latter is singularly, if not criminally, unfair.

It is indisputable that the physician is the only real altruist in any commun-

ity. He alone endeavors by every means in his power, with all his knowledge, scientific, economic and ethical, to combat disease, which is his only source of livelihood. He is himself, or through his representatives constantly making researches in the causation of diseases and the methods of limiting their spread or preventing their occurrence, and this is done without any remuneration whatever. What other profession or trade does anything approximating to this work of the physician? From the time of the Hippocratic oath to the present advanced period the physician has always subordinated his personal interests, the most vital to his existence, to the interests of his fellow man.

The sacrifices made in the interest of suffering humanity are not confined to the one class of physicians nor to one country. A recent example from a foreign and comparatively unknown land is found in Public Report of the Hookworm Commission, Public Document 888, page 177. In the sub-stations at Barros, San Sebastian and Moca the physicians so desired to take part in this labor and, dissatisfied with the results obtained by iron, etc., so desired to extend the benefits of scientific treatment to the anaemics of their country localities, that they volunteered their services to take charge of the stations without recompense." "By these men (page 219) were made true resurrections, because from cadavers they were converted in a few days into men suitable for work and capable of sustaining their families, some of them abandoning their enforced vocation of beggars."

When epidemics occur, as the yellow fever in Memphis and New Orleans many years ago, physicians from all parts of the country hasten to the afflicted without recompense and at the risk of life. What other members of the community have ever done this in an equal degree? The same was done in the cholera and bubonic plagues in Russia, costing many doctors their lives. The average physician gives one-third or more of his labor to the poor in the course of his life work; an instance of a physician refusing to attend a sick person for want of the fee is extremely rare. The work of the physician is done without ostentation and is therefore rarely appreciated. What is his reward? Without entering upon private grievances of lack of appreciation and recognition, the acts of the legislators

chosen by the public to give expression to their wishes in laws are so flagrantly suoversive of fairness and justice that it would seem only necessary to cite one specimen of the laws regulating the practice of medicine. The Connecticut General Statutes (1902) in Chapter 274, provide as follows:

"4714.—No person shall for compensation give or reward, treat, operate or prescribe for any injury, ailment or disease of another person until he has obtained such a certificate of registration as is in section 4715 provided, and then only in the kind or branch of practice stated in said certificate; but this chapter shall not apply to any chiropodist or clairvoyant who does not use in his practice any drugs, medicines or poison; nor to any person practicing the massage method or Swedish movement cure, sun cure, magnetic healing or Christian Science; nor to any other person who does not use or prescribe in his treatment of mankind drugs, poisons or medicines, chemicals and nostrums.

"4715.—Requirements for obtaining certificate of registration.—No person shall obtain a certificate of registration as in section 4714 required until he has passed a satisfactory examination before one of the examining committees appointed by the State Board of Health, nor until he has filed with said board duplicate certificates signed by the majority of said examining committee, stating that they have found him qualified to practice; nor until he has filed sworn statements giving his name, age, place of birth and present residence, stating of what medical college he is a graduate, the date of said graduation. Any person passing such examination and filing said certificates shall receive upon payment of two dollars a certificate of registration which shall state the person has been found qualified so to practice."

The act of 1907 adds:

"From and after January 1, 1912, no person shall be eligible to examination until he shall in addition to the foregoing requirements present to said committee satisfactory evidence that before beginning the study of medicine he has completed a course of study of at least nine months in chemistry, physics and general biology. No person shall be eligible to said examination until he presents to the committee satisfactory evidence that he has received a diploma from some legally incorporated and reputable medical college, as determined in

section 4718, nor until he has presented a certificate of good moral character by two reputable citizens of this State, and also satisfactory evidence that before beginning the study of medicine he has graduated from a college, high school, etc., or that his preliminary education is equivalent thereto."

Other States have enacted similar laws, discriminating clearly against the educated physician. The latter may not practice medicine unless he has a superior preliminary education, has graduated from an approved medical school and passed a State examination. But any other man or woman may without certificate of previous training and without certificate of moral character even treat any one, so long as he or she uses no drugs. In most infectious diseases the progressive physician uses no medi-

cine but guides the case to a successful termination by diet, ventilation, etc. The old and absurd idea that the practice of medicine consists of prescribing drugs, and that the public needs to be protected against poisoning, still holds. A masseur or quack who may by omitting the application of certain remedial agents, like antitoxin in diphtheria, permit the patient to die, is exonerated because he has not used medicines. And the public is not protected against being gulled by such a creature, while it is protected against the trained doctor. The public conscience needs to be aroused to this unarranted injustice to a class of men and women who certainly deserve the protection of the law which now discriminates against them in the most unjustifiable manner.

CORRESPONDENCE

Boston, Mass., March 23, 1912.

To the Editor of the

SOUTHERN CALIFORNIA PRACTITIONER,
Los Angeles, Cal.

DEAR SIR:—

Believing that you are interested in any movement for the advancement of medical education, the following information in regard to the plan for improved graduate instruction at the Harvard Medical School is sent to you.

In accordance with a recommendation from the Faculty of Medicine, the Corporation of Harvard College voted on May 8, 1911, to establish a Graduate School of Medicine. The Graduate School of Medicine will take control of all graduate instruction in medicine October 1, 1912, and will be administered by a separate Dean and Administrative Board. Thus the Graduate School of Medicine is placed on an equality with the Medical School proper and the Dental School.

Graduate teaching has been carried on at the Harvard Medical School for many years, and in the past few years the amount of such teaching has greatly

increased. During the past year 451 students were enrolled in the courses for graduates. The growing demand for such instruction, together with the appreciation of the great benefit of such opportunities to the profession and to the public, led to this plan of more systematic organization and a greater development of this work. The new feature in this movement, then, does not lie in the giving of graduate instruction, but in the recognition that this work is of sufficient importance to warrant the establishment of a separate department.

On February 28, 1912, the Board of Overseers of the University confirmed the appointment of Dr. Horace D. Arnold, of Boston, as Dean of the Graduate School of Medicine. The work of organization has begun and plans are being developed which promise to make this an important move in medical education. This is the first time in this country that the development of graduate medical teaching has been undertaken on a university basis.

The object is to extend to graduates in medicine opportunities for further

study that are as thorough and scientific as the best instruction given in a first-class medical school, and to offer to those who are qualified the best opportunities for advanced study and research in all branches of medical science. The laboratories of the Harvard Medical School are exceptionally well equipped for this work, and the clinical facilities

in the hospitals and other institutions of Greater Boston are excellent. There is every opportunity to build up a strong school.

The above information is being sent to a few of the leading medical journals for such use as they wish.

Office of the Dean
of the Graduate School of Medicine.

SCIENTIFIC PROCEEDINGS.

Los Angeles Clinical and Pathological
Society Meeting of September
23, 1911.

PRESENTATION OF PATIENTS.

Addison's Disease.

Dr. Soiland presented for diagnosis a woman whom he had had under treatment for the past month. History: Two years ago shoulders and hands became stiff, bleeding gums, general weakness, together with gradual bronzing of skin. Since having her under high frequency, sclerotic condition of skin has cleared up to a certain extent. Joints of hands ankylosed, skin tense and shiny. Dr. Soiland's diagnosis: Addison's disease. No pigmentation of mucosa, no digestive disturbances, no destruction of bone and cartilage. She has improved fifty per cent. during the last month.

DISCUSSION.

Dr. Joseph King said it was not Addison's disease and gave his reasons, having had the patient under his care previously. He said it was scleroderma. Symptoms were typical of that condition. Prognosis not good. Variable in duration and progress.

Dr. McNeil spoke of a similar case shown two years ago. Case still under observation.

Dr. Bridge thought there would later be a contraction of the blood vessels, with ultimate ulceration.

Dr. King considered it a fibrosis rather than an atrophy.

II.

Cancer.

Dr. Cole presented a man aged 57 years, greatly emaciated and cachectic. Good family history. No previous illness. Eight months ago dysphagia, first for solids, then for liquids. This gradually increased until patient had to have nutrient enemata. Bougies (three-fourth inch) were passed locating obstruction about the third dorsal vertebra. There was no bleeding and this enabled patient to take soft food. The heart is normal but displaced to the left. There is an area of dullness to the left of the sternum and enlargement of the cervical glands. No t. b. in sputum. Urine and blood normal. Later a gradual hoarseness—paralysis of the left vocal cord. The esophagoscope was not used. Dr. Cole's diagnosis, malignant neoplasm (extra-esophageal) with secondary recurrent laryngeal paralysis due to pressure. Gastric fistula to be considered when bougie failed to give relief. Surgical interference inadvisable.

III.

Poliomyelitis.

Dr. Charles Lewis Allen presented a boy aged 12 years. Six years ago had what patient says was typhoid, followed by hemiplegia. Dr. Allen thinks it must have been poliomyelitis with hemiplegic distribution. Patient's left leg and arm

flaccid—marked left club foot. No sensory or sphincter involvement. Patient seeks relief for foot.

PRESENTATION OF SPECIMENS.

I.

Dr. Orbison presented a series of photographs showing:

- (a) Acromegaly.
- (b) Pseudo muscular hypertrophy.

II.

Dr. Clarence Moore presented:

- (a) Chronic indurated ulcer of lesser curvature of stomach.
- (b) Fulminating carcinoma of stomach with pyloric obstruction—duration seven months.
- (c) Female with twenty-five years of ulcer history with carcinoma superimposed upon ulcer.

III.

Dr. Richardson presented specimen of right maxilla and malar bone removed from a man 61 years old for malignant disease originating as an epithelioma of the maxillary sinus. Preliminary ligation of external carotid reduced hemorrhage to a minimum. Half anesthesia with ether was used. Dr. Richardson described Koenig's technique for holding the eye in place.

IV.

Dr. Lobingier showed three specimens:

- (a) Gangrene of gallbladder.
- (b) Meckel's diverticulum.
- (c) Subacute perforation of the appendix without fever.

V.

Dr. Allen presented the brain of an eighteen-months-old defective child: Right eye normal, left eye rudimentary. Brain asymmetrical, with only one optic tract.

VI.

Dr. Hill Hastings presented bone removed from under vocal cords through low tracheal opening. Child was cyanosed and various diagnoses were made of tumor, abscess of the mediastinum, retrosternal sarcoma, etc.

The Second Monthly Meeting of the Los Angeles Clinical and Pathological Society, October 28th, 1911.

SCIENTIFIC PROCEEDINGS.

PRESENTATION OF CASES.

"606" Poisoning.

Dr. H. G. Brainerd presented a case of neuritis due to arsenical poisoning, the result of intramuscular injections of "606." The patient was a man of 45, presenting typical symptoms of locomotor ataxia. The Wassermann reaction was positive. On the 15th of May, about four weeks before Dr. Brainerd saw him, "606" was given, and the Wassermann reaction was negative after two examinations in July. At this time he complained of shooting pains, which later disappeared, but he complained of coldness in the legs and constant pain. Electrical tests showed typical nerve degeneration. He was absolutely unable to lift one toe, and the other only a little, and the gait was characteristic. There was a typical peripheral neuritis in the left leg, the right leg also being involved, but less markedly. There was no optic neuritis. The condition improved under strychnine, and the gait also had improved greatly in the past month.

The chairman mentioned an interesting case of tabes he had recently seen. The patient had an optic neuritis and the red field had diminished more than the green in both eyes.

II.

Cervical Rib.

Dr. H. H. Sherk, Pasadena, presented a patient with cervical rib. The patient was a woman 27 years old, who two years ago first noticed a lump on the neck. She now complained of some pain in the arm, which had been present to some extent for the past year, but there was no atrophy.

DISCUSSION.

Dr. James T. Fisher asked why this condition had developed at this age. Dr.

Sherk replied that the literature showed that the majority of cases developed at the age of 27 years. The earliest reported was 13 years and they had been known to develop as late as 50 years. The treatment, of course, was removal.

Dr. F. M. Pottenger had had three cases of cervical rib in the past year. One patient had noted that the arm was weaker and had some pain, one complained only of slight pain, and the third had no arm symptoms. These were all women.

Dr. Sherk added that the majority of these patients were women.

III.

Actinomyces.

Dr. Joseph King reported a case of actinomycosis, and presented the patient, a man aged 35 years, a German by birth, who had lived much in Italy. Most of the physicians who had seen him thought it lues. The family history was negative and the patient believed he had had no luetic infection. The trouble began in February, 1910, with a small lesion on the lower lip, which he thought nothing but a canker sore. The condition progressed, the physicians who saw him diagnosed syphilis and he was given anti-syphilitic treatment, the ulcer being cauterized. This did no good. Later a swelling appeared near the root of the tooth, which ruptured, and pus escaped. In New Orleans Dr. Dyer diagnosed syphilis and he was again put on anti-syphilitic treatment, without relief. He then came to Los Angeles and saw Dr. Lasher, who probably makes the correct diagnosis, although Dr. King had only just learned this fact. Dr. King had first seen him June 10th, last, at the Sisters' Hospital.

The neck had a board-like, brawny induration, there were six small subcutaneous abscesses, the glands were not involved, and the ulcer in the mouth had a firm induration around it. Blood examination showed the ray fungus and the condition was diagnosed as actino-

mycosis of the skin and mucous membrane. As the man could not take the iodides in any form, copper sulphate was prescribed and he was later put on the X-ray, which helped him very much. Then he went to New York City, the condition became worse, and he was seen by Dr. McKee, editor of the Journal of Cutaneous Diseases, who confirmed the diagnosis. During his stay in Italy the diagnosis of syphilis was again made and he was put on anti-syphilitic treatment. He received seven injections and was given the iodides and returned with a marked eruption. When the X-ray treatment was stopped the condition began to spread. He was now much better and would probably recover.

DISCUSSION.

Dr. A. S. Lobingier did not take the sanguine view of Dr. King as to the prognosis in this case. He thought the doctor ought to be very certain that the lungs were not involved and that the patient was not suffering from something more serious than a common cold. He had had two cases in the last two years. In the first the uterine appendages were involved, the infection extending to the kidney, then to the pancreas and then to the liver and to the base of the right lung, finally destroying life. There was an enormous discharge of bile from the gall bladder. The second patient had all the symptoms of gastric ulcer persisting four or five months. There was rapid pulse and tenderness over the liver and pylorus. There was no history of pulmonary involvement at that time. There were some suspicious-looking ulcers in the throat. A gastroenterostomy revealed no stomach lesion, but the gall bladder was under tremendous tension, an enormous amount of bile draining away in 24 hours, which was fairly clear and transparent. The liver was much enlarged, and he rapidly developed pulmonary and cardiac symptoms. Such cases should be regarded with extreme conservatism. Nearly all had received

the iodides without improvement. He did not wish to be understood as saying one could not cure actinomycosis of the lung or any other organ, but he doubted whether many cases reported as cured, if followed up, would bear out that assertion.

Dr. Stanley Black said that whether this was now an actinomycosis it was difficult to determine, but he undoubtedly did have that condition, the finding of the ray fungus proved that. But whether this ulceration was due to the ray fungus depended entirely upon whether the ray fungus was present in the tissues at this time. All the curettings should be carefully examined for the ray fungus. Whether the X-ray would destroy the ray fungus, or at least render it so small that it could not be observed, as in the case of blastomycoses, he did not know. As to the prognosis, he felt optimistic. He believed that the iodides should be given in minimal doses. In one case he had seen, the patient could take the iodides in no form, and death resulted from intestinal obstruction. He felt, however, that his optimistic view was borne out by two cases treated more than twenty years ago. Both were now living and well.

Dr. F. C. E. Mattison asked if the doctor had tried the idonucleoids.

Dr. King replied that he had not, but that ten grains of potassium iodide produced a rash and if the dosage was continued would soon render him *hors de combat*. This was a discouraging feature, for in the case of those who could take large doses of the drug, the condition quickly disappeared. He knew of one patient who took 150 grains three times a day for three or four months, and was now alive and well. But this patient did improve remarkably under the X-ray. He believed the patient was suffering from a common acute coryza, as the condition had only developed since last Friday. In reply to a question by Dr. Howard,

Dr. King said that the patient was given $\frac{1}{4}$ grain of copper sulphate three times a day for about three months, but he did not know whether it had done him any good.

Dr. Howard said that Dr. Bridge and he had had some fifteen or twenty cases which they had watched carefully for infection of the lung, and they had done much better on copper sulphate than on the iodides.

IV.

Cancer of Conjunctive.

Dr. Frank Miller presented a case of malignant growth of the conjunctive. He wished the opinion of the members as to the best method of treatment. The patient had presented himself two weeks ago showing the pigmentation of the conjunctiva. It was a question whether to do any surgery, or keep him on the X-ray or do a complete excentration and then use the X-ray.

V.

"Fast Cure."

Dr. George L. Cole presented a patient who had been taking the "fast cure." This man had eaten absolutely nothing for two weeks and drank but little water, and stated that he was not at all hungry, and had consulted Dr. Cole as to the advisability of continuing the fast indefinitely. The patient, a man 54 years old, had been unable to lie on the left side, had difficulty in breathing and shortness of breath. He weighed, at 20 years, 206 pounds; at 54 years, 277 pounds, when he began the treatment. At the end of the treatment he felt better than he had for ten years; the unpleasant symptoms had disappeared, and he lost 27 pounds during the fifteen days' fast. Dr. Cole had suggested that he take a glass of buttermilk, and two bananas during the day. There was present a tachycardia. At the end of two weeks on the buttermilk and bananas, there was no change in weight and the heart action was much improved.

EXHIBITION OF PATHOLOGICAL SPECIMENS.

I.

Glioma of Eye.

Dr. Frank Miller presented a specimen, half of the eye of a baby with glioma. The condition developed when the child was two months old and was removed when she was three months old. There was a history of trauma. The child had a swollen eye and there was evidence of hemorrhage. This cleared up and later she returned with the condition for which the eye was removed.

*Appendix in Femoral Hernia.**Osteomyelitis.*

II.

Dr. Lewis Morton presented (a) a specimen of strangulated femoral hernia containing the appendix. There had been no history of appendiceal trouble; (b) a specimen of osteomyelitis in a boy of twelve years, with a history of spontaneous fracture of the middle third of the thigh seven weeks subsequent to an injury received while riding in a wagon. At first he was treated for rheumatism and it was only following the fracture that he was removed to the hospital and operated upon. Before operation no fluctuation could be detected, so great was the tension. The lower third had the periosteum stripped off entirely, and with a gutter in the bone it was packed and drained.

DISCUSSION.

Dr. W. W. Richardson had seen a child with a similar condition about three years ago, a spontaneous fracture following acute osteomyelitis. The sequestrum extended the entire length of the femur, but did not involve the epiphyses. That was removed, the Hodgkin splint was used, the child was kept in the hospital more than a year, a complete new shaft was formed, and there was but slight shortening.

Dr. Witherbee called attention to the extreme fatality of these cases, sometimes in a comparatively short time. He had seen one case four days after the

injury and the temperature was then 105°, and the condition so severe that operation was out of the question, the boy dying a few hours later.

Dr. C. W. Pierce referred to a case he had seen in the Massachusetts General Hospital. The entire humerus was gone, yet Dr. Scudder had expressed the belief that the child would recover and the result be very good.

III.

Ovarian Cysts.

Dr. Sherk presented two specimens of multilocular ovarian cysts, both very large. In one case, 7½ quarts of fluid had been withdrawn, and one of the cysts was still intact.

IV.

Uterine Fibroid.

Dr. M. L. Moore presented a specimen of large sumucous uterine fibroid removed by the supravaginal route.

V.

Aneurysm.

Dr. George L. Cole presented a specimen of aneurysm. The patient was presented at the last meeting of the Society, with a diagnosis of malignant disease of the thorax.

VI.

Gallstone.

Dr. O. O. Witherbee presented a stone taken from the common duct, where it had acted as a ball valve. There were no other stones present and there was complete absence of the gallbladder and nothing that seemed to take the place of the cystic duct. There was no history of typhoid, but some malaria. The jaundice slowly cleared up. He had recently removed some stones from the common duct, the patient being a young man of twenty years, who had been persistently and markedly jaundiced. In that case the jaundice cleared up very rapidly, probably because the condition was not of long standing, as in the first case.

VII.

Gallstone Removed Post-Mortem.

Dr. C. W. Pierce presented some

stones removed post-mortem. The patient, a man aged fifty-five, refused operation. There was first an intense diarrhoea for some time, and then tenderness in the region of the gallbladder. The stones finally ulcerated through and were found in the duodenum. The fact that so many cases of cholelithiasis were reported in insurance work, showing that they had not been recognized, called to mind how weak in diagnosis and treatment one often was. It should be borne in mind that these cases always present a leucocytosis and usually epigastric pain.

DISCUSSION OF DR. WITHERBEE'S CASE.

Dr. Lobingier said that absence of the gallbladder was extremely rare. There could usually be found a remnant of the gallbladder in the area occupied by the cystic duct. In reply to a question Dr. Lobingier said he referred to those cases where stones had long been present.

Dr. Beckett, discussing ovarian cysts, felt it very important to remove any ovarian cyst because of the possibility of malignant degeneration.

Dr. Richardson urged the importance of prompt treatment of primary fractures. He had recently seen one case that impressed this upon him. The boy

had a compound fracture of the femur and was brought into the hospital on Sunday. When he saw the boy at 10 o'clock next day, he was beyond all aid, and died within forty-eight hours of the injury, which was received on Sunday at 3 o'clock. He was first taken to the Receiving Hospital and treated and then went to the County Hospital. There was a small, clean wound, apparently not contaminated. There was no hyperemia about the wound, but some discoloration along the listening intently one could hear the gas bubble out of the wound. There was no pus. The stench was noticeable throughout the ward. Two years ago he had seen another case. That patient had died seventy-two hours after the injury. Not long ago he had seen with Dr. Wright a similar case. A short time ago he had seen a case in which gangrene had resulted forty-five days after the injury. In that case the gas bubbles could be seen. The arm was promptly disarticulated at the shoulder and the patient recovered. In no case had the bacillus been found. So far there had been nothing grown on the culture in this case. If this was so common, it was important in the treatment of primary fractures.

BOOK REVIEWS

INTERNATIONAL CLINICA. A quarterly of illustrated clinical lectures and especially prepared original articles on treatment, medicine, surgery, neurology, pediatrics, obstetrics, gynecology, orthopedics, pathology, dermatology, ophthalmology, otology, rhinology, laryngology, hygiene, and other topics of interest to students and practitioners, by leading members of the medical profession throughout the world. Edited by Henry W. Cattell, A.M., M.D., Philadelphia. Volume L, Twenty-second Series, 1912. J. B. Lippincott Company, Philadelphia and London: Price \$2.00.

This volume contains the usually large number of interesting monographs. One of the important papers is on Sanitarium

Treatment of Tuberculosis in Private Practice, by J. H. Mudgett, M.D., of Philadelphia. The Doctor holds that tuberculous patients should be treated at home instead of sending them to an institution. Emphasis is placed on the importance of rest and the open-air treatment for tuberculosis. Tuberculin should be used in nearly all cases. For the mixed infection, a mixed vaccine gives good results. If the diagnosis is made early, a large percentage of cases can be cured or arrested.

An Abstract Report of a Case of Transplantation of a Testicle, by Levi J. Hammond, M.D., Surgeon to the Methodist Episcopal Hospital, Philadelphia, and Howard A. Sutton, M.D., Assistant Surgeon to the Methodist Episcopal Hospital, Assistant in Anatomy, University of Pennsylvania, Philadelphia. Following the removal of a sarcomatous testicle from a patient 19 years of age, there was substituted a testicle secured the preceding day from a patient 28 years of age who had died from hemorrhage following rupture of the liver and was otherwise apparently free from disease. About seventeen hours elapsed between the removal and implantation of the testicle, and total function had been suspended about 19½ hours. The operation was done November 13, 1911. February 2, 1912, there was some increasing development of the transplanted organ, which had undergone marked atrophy about a month after the operation. Thus far there was no return of the sarcomatous process. The effort demonstrates that anastomosis of these minute vessels is possible; and that, under proper precautions, tissues, from subjects dying from injury and free from disease, may be removed, preserved, and utilized in living tissues, without producing general systemic disturbances.

The Progress of Medicine during the year 1911 is reviewed by Drs. A. A. Stevens, Edward W. Watson and Lucius W. Johnson. This review opens with a discussion of Progress Along General Lines.

One Kind of Progress, the Doom of the Practitioner. It needs no prophet and no prophetic gaze into the future to see that the practitioner is rapidly merging into the salaried State official. There he will be a necessity, and as a necessity he will survive, for the masses, while for the affluent he will be an archaic luxury. When the readjustment comes, each man, or several men in asso-

ciation, will have districts assigned to them, limited in extent, which will conserve their forces, and the public will have a limited choice.

All of which has a strong socialistic prophetic flavor. Though possibly this may come to pass, it can scarcely be correctly considered part of a review of the progress of medicine during 1911. As a matter of fact, the so-called general practitioner is today a specialist of the highest order.

SPONDYLOTHERAPY, PHYSIO-THERAPY OF THE SPINE BASED ON A STUDY OF CLINICAL PHYSIOLOGY. By Albert Abrams, A.M., M.D., (University of Heidelberg) F.R.M.S., Consulting Physician to the Mount Zion and French Hospitals, San Francisco; formerly Professor of Pathology and Director of the Medical Clinic, Cooper Medical College (Department of Medicine, Leland Stanford Junior University), San Francisco. Third Edition, enlarged. 673 pages. Philopolis Press, 406 Lincoln Building, San Francisco. 1912.

The work is essentially a study of the spinal reflexes of the internal organs. At first the reviewer was not favorably inclined toward this work, but a closer study of the subject has convinced him that Dr. Abrams is engaged in a scientific study that is worth while. Even the laity know that cold applied to the back of the neck may arrest hemorrhage from the nose, and that heat applied to the small of the back may hasten menstruation. The author has investigated the visceral reflexes, and elaborated the methods of stimulating or controlling the spinal centers governing these reflexes. Others, less scientific but more astute, have determined empirically that manipulation of the spine does sometimes cure conditions that have failed of cure in the hands of experienced physicians. So it has come to pass that schools of practice exploiting spinal manipulation as a cure-all, have arisen. Neither the fury of tongue nor the truculence of pen can gainsay the confidence which these systems of practice have inspired in the community. The apparent success of sectarian medicine and cranky

cults, would be a very unsafe guide for the scientific investigator. On the other hand, the most preposterous claims of the irregulars should not deter us in the rational scientific investigation of all matters appertaining to our profession. The truth is mighty and will prevail.

MORTALITY STATISTICS, 1910. Bulletin 109, Department of Commerce and Labor, Bureau of the Census, E. Dana Durand, Director. General death rates; causes of deaths; deaths of infants from each cause, by days for the first week of life, by weeks for the first month, and by months for the first two years. Washington. Government Printing Office. 1912. 191 pages.

The registration area in 1910, the year covered by this report, comprised 58.3% of the total population of the United States. California has been in this registration area since 1906. Washington and Wisconsin were added in 1908, and Ohio in 1909. In the present report, certain counties in California, Colorado and Washington showed an exceedingly low death rate. For some years there has been very close similarity between the general death rate of the registration area of the United States and that of England and Wales. For the year 1908 the figures were the same (14.8), for 1909 the English rate (14.6) exceeded very slightly that of the registration area (14.4), but for 1910 the English rate (13.5), which was the lowest ever recorded in that country, was lower than that of the registration area (15) and nearly as low as that of the rural part of the registration states (13.4). In 1910 California's rate was 13.5, Los Angeles 14.0, San Francisco 15.1. The highest rate that year was Richmond, Va., 22.6, and the lowest was Seattle, 10.1.

Pellagra. The deaths reported from pellagra, in the registration area, were: 2 in 1900, 2 in 1903, 1 in 1904, 23 in 1908, 116 in 1909, and 368 in 1910. A large portion of the region in the United States in which pellagra exists, is not included in the registration area, so that these figures probably represent only a

small proportion of the actual number of deaths from pellagra in the United States. The disease was frequently not recognized or reported until recent years, so that the increase in the number of deaths recorded cannot be regarded as representing an actual increase in the annual mortality from this disease.

Tuberculosis. The total number of deaths reported in the registration area for 1910 was 86,309, whereas in 1909 there were reported 81,835. The increase was apparently due to the increase in the area covered by the returns, since the death rate for 1910 (160.3 per 100,000) was slightly less than that for 1909 (160.8), and likewise less than that for any preceding year of registration. For the 10-year period 1900 to 1909 the annual average rate was 183. Among the municipalities of 100,000 population or over, the highest death rates in 1910 were:

Denver, Colorado,	330.4
Cincinnati, Ohio,	290.2
New Orleans, La.,	285.1
Birmingham, Ala.,	282.1
Cambridge, Mass.,	269.1
Memphis, Tenn.,	266.3
Los Angeles, Cal.,	259.7
Nashville, Tenn.,	256.9
Richmond, Va.,	254.1
Washington, D. C.,	252.9
Albany, N. Y.,	252.1
Baltimore, Md.,	250.9
Newark, N. J.,	245.3
Louisville, Ky.,	241.6

Two of these, Denver and Los Angeles, are cities to which invalids resort for the cure of tuberculosis. Nevertheless, the proportion from Los Angeles compares favorably with the other cities named.

Cancer. 41,039 deaths were attributed to cancer in 1910, an increase of 3,477 over the preceding year. The death rate from cancer increased from 73.8 per 100,000 in 1909 to 76.2 in 1910, the highest ever recorded.

In all the registration states, except

California, Connecticut and Rhode Island, increased death rates from cancer are shown for 1910 as compared with 1909. The highest rates were those of Vermont (110.3), Maine (101.4), and New Hampshire (98.4). Among the rates for the cities, the highest were those of Albany, N. Y., 138.5; San Francisco, Cal., 113.5; Los Angeles, Cal., and Boston, Mass., each 104.5; and Providence, R. I., 101.1. It is remarkable that there are not more deaths from cancer reported from Southern California, where the climatic conditions are so attractive to this class of patients, and especially elderly people, who are so frequently the subjects of cancer.

Infant Mortality. Out of 100 deaths at all ages recorded in the registration area in 1910, 27 occurred in the first five years of life and 19 during the first year. Among the registration states, the ratios of deaths of infants under one year to the total number of deaths, ranged from 11% for California to 24% for Pennsylvania, while for deaths of children under 5 years of age the range was from 16 in California to 34 in Pennsylvania. It would seem that California is a healthy state for infants. Here the children may be out-of-doors practically all the time, which may in part account for the low infant mortality in this region.

OPERATIVE OBSTETRICS, INCLUDING THE SURGERY OF THE NEW-BORN. By Edward P. Davis, M.D., Professor of Obstetrics, Jefferson Medical College, Philadelphia. Octavo volume of 483 pages, with 264 illustrations. Philadelphia and London: W. B. Saunders Company. 1911. Cloth, \$5.50 net.

The work is a concise statement of the modern methods of operating in obstetrics, amply illustrated, and contains short bibliographies of a practical nature.

A few years ago there seemed no question but that the presence of an ectopic gestation demanded operation as soon as the diagnosis was made. Those who urged this view cited the dangers of hemorrhage and shock as sufficient rea-

son for immediate operation. Champney's observations upon hospital patients who were kept in bed under observation, but without operation, showed that a very considerable proportion of cases of ectopic gestation, ruptured and unruptured, recovered without interference. These patients did not regain their accustomed health as soon as did those subjected to operation, but they did not die from hemorrhage or shock. Robb's paper before the American Gynecological Society, 1907 Transactions, describes experiments upon animals in which the pelvic blood-vessels were severed, with the recovery of the animals from profuse hemorrhage. The clinical experience of obstetricians embraces cases where it seems as if immediate operation turns the tide, through shock, against the patient. In America, especially, as well as in Europe, the discussion has again arisen as to whether all cases of ectopic gestation should be subjected to immediate operation. It is recognized that all cases of ectopic gestation recover more completely and permanently if subjected at some time to operation.

While we believe that all cases of ruptured ectopic gestation should not be subject to operation as soon as they are seen, we must not forget that statistics abundantly show that a patient having ectopic gestation recovers more completely and satisfactorily under operation than by any other treatment. Operation, then, remains the only justifiable treatment for ectopic gestation. The exact time and circumstances under which it is to be applied must be left to the judgment of the individual operator.

RECENT METHODS IN THE DIAGNOSIS AND TREATMENT OF SYPHILIS. (The Wassermann Reaction and Ehrlich's Salvarsan, "606"). By C. H. Browning, M.D., Lecturer on Bacteriology in the University of Glasgow, and Ivy McKenzie, M.D., Director, Western Asylums' Research Institute, Glasgow. Octavo, 303 pages. Cloth, \$2.50 net. Lea & Febiger, Publishers, Philadelphia and New York, 1912.

The Germans will probably pass the review of this volume with the comment:

nights neues. However, it is an interesting presentation of the subject. Though the authors may have begun their investigations unprejudiced, they were quite evidently enthusiastic about salvarsan at the time they wrote the book. It is one of those works that needs must be read to be appreciated. One of the most interesting parts to the reviewer is the introduction, some ten pages, written by Robert Muir, M.A., M.D., F.R.S., Professor of Pathology in the University of Glasgow. We only regret that such poor paper has been used, which gives it the general impression of a cheap work.

The writers declare that excision should be resorted to, especially when the chancre is extensive and has a large indurated base. To the reviewer this would seem objectionable as a rule. When the treatment is begun in the primary stage, or early in the secondary stage, the authors recommend two intravenous injections of salvarsan at an interval of three weeks, with a course of mercurial inunction following each injection. In more chronic cases, and especially when the disease has been refractory, three or even four injections may be advisable, with a corresponding number of courses of mercurial inunction. This would seem to be contrary to the experience of many observers, that one injection of salvarsan usually suffices to cure the ordinary case of syphilis.

CLINICAL DIAGNOSIS. A MANUAL OF LABORATORY METHODS. By James Campbell Todd, M.D., Professor of Pathology, University of Colorado. Second Edition, revised and enlarged. 12mo. of 469 pages with 164 text-illustrations and 13 colored plates. Philadelphia and London: W. B. Saunders Company, 1912. Cloth \$2.25 net.

In this work the various laboratory methods are presented clearly and concisely. Among the many additions to this edition may be mentioned: The use of artificial light and the importance of numerical aperture in microscopic work; photomicrography with simple apparatus; the antiform method for tubercle

bacilli; detection and significance of albumin in the sputum; Tsuchiya's modification of Esbach's test; the formalin test for ammonia and Benedict's methods for sugar in urine; volume index of red blood-corpuscles; Wright and Kinneutt's method of counting blood platelets; Harlow's blood-stain; a simple technic for the diagnosis of typhoid fever by blood-cultures; the Wassermann reaction, and Frothingham's impression method in the diagnosis of rabies.

SKIN AND VENEREAL DISEASES.

Volume IX of The Practical Medicine Series, comprising ten volumes on the year's progress in medicine and surgery, under the general editorial charge of Gustavus P. Head, M.D., Professor of Laryngology and Rhinology, Chicago Post-Graduate Medical School; and Charles L. Mix, A.M., M.D., Professor of Physical Diagnosis in the Northwestern University Medical School. Edited by W. L. Baum, M.D., and Harold N. Moyer, M.D. Series 1911. The Year Book Publishers, 180 N. Dearborn Street, Chicago.

The present volume is one of a series of ten issued at about monthly intervals, and covering the entire field of medicine and surgery. Each volume is complete for the year prior to its publication, on the subject of which it treats. Price of this volume \$2.25; Price of the series of ten volumes \$10.

The series is published primarily for the general practitioner. At the same time, the arrangement in several volumes enables those interested in special subjects to buy only the parts they desire.

The volume contains abstracts of current literature, not only on the skin and venereal diseases, but also upon a number of miscellaneous subjects, such as the history of medicine, medico-legal questions, insurance, and sociology. The series has come to be a standard work. We don't see how we got along without it.

A MANUAL OF PATHOLOGY. By Guthrie McConnell, M.D., Professor of Pathology and Bacteriology, Temple University, Medical Dept. Philadelphia. Second Revised Edition. 12mo. of 531 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1911. Flexible leather, \$2.50 net.

Here we find in concrete form the essentials of pathology, in a well-made little volume, bound in flexible leather. In

the chapter on tumors, Adami's method has been given in detail. Although the older form may be adhered to on account of its familiarity, yet the latter is based on much more scientific deductions and should be more widely taught. The spleen and lymphoid tissues have been removed from the chapter on ductless glands and placed in a chapter by themselves.

ELEMENTS OF HYDROTHERAPY FOR NURSES. By George Knapp Abbott, M.D., Dean of the Faculty and Professor of Hydrotherapy and Practice of Medicine in the College of Medical Evangelists, Loma Linda, Cal. Published by the Review and Herald Publishing Association, Washington, D. C., 1912.

The nurse who carefully studies this work will know more of Hydrotherapy than nine out of ten of practicing physicians. It might be considered pernicious on that account.

MICROSCOPY, BACTERIOLOGY AND HUMAN PARASITOLOGY. By P. E. Archinard, A.M., M.D., Bacteriologist, Louisiana State Board of Health and City Board of Health, New Orleans. New (second) edition, thoroughly revised. 12mo, 267 pages, with 100 engravings and 6 plates. Cloth, \$1.00, net. The Medical Epitome Series. Lea & Febiger, Publishers, Philadelphia and New York, 1912.

PHYSIOLOGY. A Manual for Students and Practitioners. By A. E. Guenther, Ph.D., Professor of Physiology in the University of Nebraska, and Theodore C. Guenther, M.D., Attending Physician, Norwegian Hospital, Brooklyn, N. Y. New (second) edition, thoroughly revised. 12mo, 269 pages, illustrated. Cloth, \$1.00, net. The Medical Epitome Series. Lea & Febiger, Publishers, Philadelphia and New York, 1912.

The two volumes above mentioned contain all that could be wisely considered in the allotted space. They are the acme of convenience.

MISCELLANEOUS

THE CALIFORNIA POISON LAW.

The following letter, from the Alameda County Pharmaceutical Society, is timely and to the point. It presents in condensed form much information that should be carefully noted by all honorable medical men, and is an attempt in a direction that demands our support:

OAKLAND, CAL., March 1, 1912.

Dear Doctor:—In an effort to acquaint you more fully with certain provisions of Section 8 of the California Poison Law, the Alameda County Pharmaceutical Society is submitting to you this letter and asks that you kindly give it your serious consideration.

This letter has been previously submitted to the Alameda County Medical Society, which Society is giving our efforts their unqualified endorsement and support.

Certain portions of Section 8 of the California Poison Law, which are of particular interest to the physicians of this State, are as follows:

SEC. 8. It shall be unlawful for any person, firm or corporation to sell, fur-

nish or give away or to have in their or his possession any cocaine, opium, morphine, codeine, heroin, alpha eucaine, beta eucaine, nova caine or chloral hydrate or any of the salts, derivatives or compounds of the foregoing substances or any preparation or compound containing any of the foregoing substances or their salts, derivatives or compounds, excepting upon the written order or prescription of a physician, dentist or veterinary surgeon, licensed to practice in this State, which *order or prescription shall be dated, and the name of the person for whom prescribed, written in by the person writing said prescription,* and it shall not be again compounded or dispensed if each fluid ounce or avoirdupois ounce contains more than 8 grains of opium, 1 grain of morphine or 2 grains of codeine or one-half grain of heroin or 1 grain of cocaine or 1 grain of alpha eucaine or 1 grain of beta eucaine or 1 grain of nova caine or 60 grains of chloral hydrate, *excepting upon the written order of the prescriber for each and every subsequent compounding or dispensing.* It shall be unlawful for any practitioner of medicine, dentistry

or veterinary medicine to furnish or to prescribe for the use of any habitual user of same, any cocaine, opium, morphine, codeine, heroin or chloral hydrate or any salt, derivative or compound of the foregoing substances or their salts, derivatives or compounds; provided, however, that the provisions of this section shall not be construed to prevent any duly licensed physician from furnishing or prescribing in good faith for the habitual user of any narcotic drugs, who is under his professional care, such substances as he may deem necessary for their treatment, when such prescriptions are not given or substances furnished for the purpose of evading the purposes of this act.

You will observe from the above that it is unlawful for a druggist to sell a nurse any of the prohibited drugs without a physician's prescription.

To fill a narcotic prescription unless the name of the patient and the date are written thereon *by the physician*, and signed by him.

To fill a narcotic prescription received by telephone unless the physician sends or gives a written prescription later therefor.

To refill a narcotic prescription without the written order of the physician, if same contains more than the amounts of the prohibited drugs provided for in this law.

We trust you may see fit to give this matter your earnest support. Our object in seeking your co-operation is to assist the druggists in maintaining this most excellent law with as little inconvenience as possible to yourself, your patient and the druggist.

Yours very sincerely,

THE ALAMEDA COUNTY PHARMACEUTICAL SOCIETY,

W. Bruce Philip, President.

F. S. Klinkner, Secretary.

THREE NEW DEATHS FROM SALVARSAN.

PARIS, Feb. 9, 1912.

On February 9, Dr. Gaucher, clinical professor of cutaneous and syphilitic diseases at the Faculté de médecine de Paris, reported before the Académie de médecine three new cases of death due to salvarsan. The first was the case of a young man of 24, of good general health

and free from other disease, who had contracted syphilis two years previously. The case had been well treated, and there were no manifestations after the roseola. Against the advice of his physician, he went to Paris, and although he had at the time no manifestation of the disease, he went to a physician who, in thirteen days, gave him three intravenous injections of 0.03 gm. salvarsan. The day after the third injection he went home, and six days later, after violent headaches, he was stricken with convulsions, soon fell into coma, and died in twenty-four hours.

The second case was reported to Professor Gaucher by Dr. Vaubourdolle of Blerè. A man aged 53 had contracted syphilis in 1894. Three years afterward, he had a right hemiplegia, due to a cerebral arteritis, which was cured by specific treatment, leaving only a little paresis, with a tendency toward contraction of the leg. In spite of Dr. Vaubourdolle's opposition, the patient had another practitioner give him an intramuscular injection of 0.03 gm. of salvarsan. Two days afterward, there were generalized pains in all the limbs, accompanied by a persistent headache, and the patient died suddenly twelve days after the injection.

The third case was reported by Dr. Yakoub, surgeon in chief of the Bulgarian Hospital at Constantinople. The patient was a woman aged 25, who had been married five years. She had been infected by her husband, who had contracted syphilis a year before her marriage. In the first year of her married life she had had a miscarriage at three months and a half, and a year afterward she gave birth at term to a child that died at the age of 10 months of meningitis. This woman, when she had been pregnant six months and a half and presented only a buccal leukoplasmia without any visceral lesion, received on Dec. 17, 1911, an injection of 0.04 gm. salvarsan in the right basilic vein. After

the usual discomforts of the first day, the patient was very well the two following days. Dec. 20, however, she was seized with nausea, vomiting and violent headache. At midnight, she lost consciousness; the next day, she was in coma. Lumbar puncture drew off a limpid normal liquid. The urine contained no albumin. Dec. 22, the coma persisted, the face and the extremities became cyanotic, the respiration became Cheyne-Stokes in character, and, in spite of a blood-letting of 200 gm., the patient died the same day at noon.—*Journal A. M. A.*

WANTED—A young physician licensed in California, to locate in small city and devote a part of his time to institution work which will pay a salary. Address Institution, care of THE SOUTHERN CALIFORNIA PRACTITIONER.

REPORT OF THE CRIMINAL ABORTION COMMITTEE OF THE CHICAGO MEDICAL SOCIETY.

Delivered before the North Side Branch at the February meeting by Charles H. Parkes, chairman.

The work of the committee is important, and while strenuous, time absorbing and exceedingly unpleasant, some gratifying results have been obtained, demonstrating that the Chicago Medical Society is becoming alert to its responsibilities in this matter. That results have been obtained to date is evidenced by the awakened interest and increasing number of calls coming to the committee every day from all parts of the city requesting information and advice. The suppression of an evil such as criminal abortion, existing since the early ages, can well be realized to be a task of years of education and publicity, and complete eradication is not hoped for. A powerful and effective measure for checking the spread of and punishing of-

fenders is the present goal of the committee.

To Dr. C. S. Bacon, former chairman of this committee, much credit is due for the successful eradication of newspaper advertising by the professional abortionist, which at that time was quite common. The stigma cast at the medical profession by the editor of one of the chief offending dailies, that police records will show that 100 abortions are committed in the city of Chicago each day by members of the medical profession, is refuted by authentic records. The above mentioned editor has steadfastly refused to appear before organized medicine and submit proofs of his allegations. He has considered the subject too rotten for newspaper attention, though up to that time the ads of known professional abortionists were considered proper reading and money-making matter for his sheet.

While Dr. Rudolph Holmes was chairman of this committee, the work, aside from the routine of education and publicity, was directed against the so-called midwife trust, and it is greatly to the credit of Dr. Holmes and his committee that the above-mentioned trust was broken.

The present efforts of the committee, aside from the regular policy of education and publicity, are being directed along the line of improving the statute of this State dealing with criminal abortion. The statute now reads that an abortion is not murder if it is done for the purpose of saving the life of the mother. The improvement we are demanding is that two or more properly qualified consultants be necessary before such an abortion be legal. Such a measure should be easily enacted with proper support from the profession and the public. The work for the year has been divided into: 1. Education and publicity; 2, Co-operation with the office of the coroner; 3, Co-operation with the office

of the State's Attorney; 4, Advising those applying for information.

Education and publicity is considered the chief means of accomplishing results, reaching the public by appearing before them and citing dangers. The press has up to date given no help in the plan, maintaining that the question is not a fit subject to go into the homes through that medium, though the reports of scandal quite frequently allow for a considerable amount of elasticity in presenting to the women and children that which is not good reading matter.

The present coroner of Cook county is deserving of praise for the impartial manner in which he is co-operating with the committee.

Every suggestion made to his office upon the subject is given careful consideration and if deemed wise is adopted. He has shown much zeal in protecting the reputations of physicians falsely accused, and in every case brought to his attention has insisted upon facts and facts alone in his reports. The committee is notified of every case of death by abortion reported to his office, and a representative of the committee is requested to be present at inquests and autopsies held and allowed to suggest questions which would seem pertinent. This action allows the committee every reasonable means to protect physicians falsely accused.

The office of State's Attorney is using every means to co-operate with the committee in cases subjected to trial and has acted as legal adviser where such advice would be of benefit.

To demonstrate the popularity of the course of the committee in promptly giving advice to those requesting it, the great number of calls received daily from physicians and hospitals, where death following abortion is eminent, is ample proof. The necessity of a proper dying declaration is emphasized. Hospitals are especially importuned to report cases coming under their care and

encouraged to assist the committee as a matter of self-protection, protection for the physician in charge and in gaining information which may lead to the guilty party performing the abortion. The committee feels that by agitation, vigilance and publicity the abortionist, as well as the public, will become aware of the dangers of this practice, and thereby much good will be accomplished.

ALBERT W. SEIDEL,
Secretary.

CHAPTER 214.

An act to amend the Political Code of the State of California by adding thereto a new section to be known as and numbered section 2185c, relating to arrest, hearing and commitment of inebriates and drug habitues to a state hospital for the insane

[Approved March 20, 1911.]

The people of the State of California, represented in senate and assembly, do enact as follows:

SECTION 1. There is hereby added to the Political Code of the State of California a new section to be known as, and numbered 2185c, and which shall read as follows:

2185c. Whenever it appears by affidavit to the satisfaction of a magistrate of a county, or city and county, that any person is so far addicted to the intemperate use of narcotics or stimulants as to have lost power of self-control, or is subject to dipsomania or inebriety, he must issue and deliver to some peace officer for service, a warrant directing that such person be arrested and taken before a judge of the superior court for a hearing and examination on such charge. Such officer must thereupon, arrest and detain such person until a hearing and examination can be had. At the time of the arrest a copy of said affidavit and warrant of arrest must be personally delivered to said person. Such affidavit and warrant of arrest must be substantially in the form provided by section 2168 of the Political Code for the arrest of a person charged with insanity. He must be taken before a judge of the superior court, to whom said warrant and affidavit of arrest must be delivered to be filed with the clerk. The judge must then inform him of the

charge against him, and inform him of his rights to make a defense to such charge and produce any witnesses in relation thereto. The judge must by order fix such time and place for the hearing and examination in open court as will give a reasonable opportunity for the production and examination of witnesses. Such order must be entered in the minutes of the court by the clerk and a certified copy of the same served on such person. The judge may also order that notice of the arrest of such person and the hearing of the charge be served on such relatives of said person known to be residing in the county, as the court may deem necessary or proper. The hearing and examination shall be had in compliance with the provisions of sections 2169 and 2170 of the Political Code. The judge, after such hearing and examination, if he believes the person is so far addicted to the intemperate use of narcotics or stimulants as to have lost the power of self-control, or is subject to dipsomania or inebriety, must make an order that he be confined in a hospital for the care and treatment of the insane, designated in such order, and the order must be accompanied by a written statement of the judge as to the financial condition of the patient and of the persons legally liable for his maintenance, as far as can be ascertained. Such order and statement shall be in substantially the form provided by section 2171 of the Political Code for the commitment of insane persons. The court shall commit such person for a definite period, not to exceed two years, but provided that he may be paroled by the medical superintendent under the same rules and conditions that the insane are paroled. Such person shall be delivered to the state hospital for the insane to which he has been committed in compliance with the provisions of section 2172 of the Political Code, providing for the commitment and deliverance of an insane person.

Sec. 2. This act shall take effect and be in force from and after July 1, 1911.

Yes, Ireland will be free,
From the center to the sea,—
Then hurrah for Liberty!
Says the Shan Von Vocht.

RULES OF THE HEALTH COMMISSIONER.

Governing the Report of Births, Deaths and Contagious and Infectious Diseases; and Placarding the Houses or Premises Where Contagious or Infectious Diseases Exist.

Adopted by the City Council of the City of Los Angeles, Cal., Oct. 11, 1911.

Rule 1. Every physician, midwife or other person assisting at a birth shall report the same to the Health Commissioner within five days in writing on blanks furnished by the Health Department.

Rule 2. Every physician shall sign a certificate of death on or before 48 hours after the death of any person whom he or she may have the care of as attending physician at the time of death, giving the date of attendance, cause of death, etc.

No certificate of death shall be accepted by the Health Commissioner signed by any person who is not a legalized physician of the State of California. All certificates signed by illegal practitioners shall be referred to the Coroner for investigation.

No certificate giving heart failure, disease of the heart, insufficiency of the heart, or dropsy as the cause of death shall be accepted by the Health Commissioner.

Rule 3. Every undertaker shall report to the Health Commissioner, giving the name, age, nativity, date of death, number and name of street, condition of life, whether married or single, sex, occupation, time of residence in the city and county, place and date of interment, on or before the fourth day from the date of death, or the day his services are accepted to perform the duties of undertaker.

Rule 4. Every physician or other person shall immediately report to the Health Commissioner, giving the name and location of any person known or suspected of being affected with bubonic plague, Asiatic cholera, typhus fever, smallpox, diphtheria, membranous croup, scarlet fever, glanders, anthrax, leprosy, measles, tuberculosis, typhoid fever, yellow fever, chickenpox, cerebro-spinal meningitis, trachoma, uncinariasis, whooping cough, mumps, dengue, dysentery,

erysipelas, pneumonia, tetanus, and Manila, Cuban, Philippine, Adobe or Kangaroo itch, anteriorpoliomyelitis, or infantile paralysis, syphilis and gonorrheal infection.

Rule 5. Every person within the city limits affected with Asiatic cholera, bubonic plague, typhus fever, yellow fever or smallpox, may, after satisfactory diagnosis has been made, be removed to the City Hospital, provided by the city for such patients, or quarantined on the premises where found. In the latter case the Health Commissioner shall quarantine said patient and the premises upon which said patient may reside for such a length of time as he may deem necessary, causing the erection thereon in a conspicuous place of said premises a black flag for Asiatic cholera and bubonic plague, and a yellow flag for smallpox, typhus and yellow fever, and at the same time place a card setting forth the facts on the door of the building in which the person sick of the disease may reside.

Rule 6. Whenever a person sick with scarlet fever is reported to the Health Commissioner, on proving the existence of the disease, he shall cause to be posted in a conspicuous place of the infected house a red placard setting forth the fact, the same to remain twenty-one (21) days or more, at the discretion of the Health Commissioner from the time said person was first taken sick with the disease, and until after the premises have been disinfected under the supervision of the Health Commissioner.

However, if a person sick with scarlet fever shall be removed by permission of the Health Commissioner to a hospital, or other place, the placard shall remain on the house for seven (7) days from the time the person was removed, whenever there are children of school age in the same house.

Rule 7. Whenever any person affected with diphtheria is reported to the Health Commissioner, on proving the existence of the disease by culture and microscopic examination, he shall cause to be posted in a conspicuous place of the house or place occupied by said person a green placard setting forth the fact, the same to remain for ten (10) days, and until after two consecutive cultures and microscopical examinations it is proven that all danger of transmission of the disease is absent, and until after the premises have been thoroughly disinfected under

the supervision of the Health Commissioner.

Rule 8. Every person affected with measles must be reported to the Health Department, and all cases excluded from school, and all persons from the same house must also be excluded from school for a period of fifteen (15) days from the time the person having measles was taken sick.

Any person occupying a house where measles exists may, by permission of the Health Commissioner, be removed to an uninfected place for observation by the Health Commissioner, and, if after ten (10) days, the person shows no sign of the disease, the Health Commissioner may issue a permit to return to school.

Rule 9. Whenever any person affected with anteriorpoliomyelitis, or infantile paralysis, is reported to the Health Commissioner, on proving the existence of the disease, shall cause to be posted in a conspicuous place of the house or place occupied by such person, a white card printed with black and yellow ink, setting forth the fact, the same to remain thirty (30) days, or longer, and until after the premises have been thoroughly disinfected under the supervision of the Health Commissioner.

Rule 10. Any child or person attending school, who has been exposed to diphtheria or scarlet fever, may, by permission of the Health Commissioner, be removed to an uninfected place for observation by the Health Commissioner. If, after seven (7) days, the person shows no sign of disease, the Health Commissioner may issue a permit to return to school.

Rule 11. No person shall enter school without a written permit from the Health Commissioner after having had smallpox, diphtheria, scarlet fever, chickenpox, trachoma, measles, whooping cough, mumps, scabies, impetigo contagiosa, ringworm, anteriorpoliomyelitis, or any quarantinable diseases.

No person shall, without a permit from the Health Commissioner, carry or remove from one building to another, or from any railroad depot to any house, or through any public streets, any person sick of any contagious or infectious disease.

Any person having an infectious disease in his home, or on or about his premises, shall, immediately after the convalescence or removal of the person affected therewith, disinfect, cleanse and

purify said house, or premises, under the supervision of the Health Commissioner.

Rule 12. All books belonging to the Public Library of the City of Los Angeles coming from the premises infected by any infectious or contagious disease, shall be disinfected under the supervision or the Health Commissioner before being returned to the Public Library.

The Health Commissioner shall report in writing to the Librarian of the Public Library the name and residence of each person affected with any infectious or contagious disease.

The Librarian, upon receipt of information from the Health Commissioner of any infectious disease existing in a house, shall refuse to issue books from the Public Library to any person residing in such house until after the Health Commissioner has declared said house thoroughly disinfected.

Rule 13. The Health Commissioner shall report in writing the name and residence of each person affected with Asiatic cholera, bubonic plague, yellow fever, smallpox, typhus fever, diphtheria, scarlet fever and measles to the Superintendent of the Public Schools and the principal of any private school in which any person so affected may be an attendant.

Rule 14. The Superintendent of the public schools, or principal of any school, upon receipt of information from the Health Commissioner of any infectious or contagious disease existing in a house or place of habitation shall immediately exclude from the schools, or school, any person so affected, or any person, or persons, residing in such house or place of habitation, and no person or persons shall be readmitted to the schools, or school, without a permit from the Health Commissioner.

REPRINTS RECEIVED.

We would advise our readers to look over this list, for you may find something here in which you are especially interested:

Uterovaginal Prolapse in Elderly Women; the Operation of choice, by George B. Somers, M.D., San Francisco.

Some misinterpretations in the teaching of gross anatomy, by H. O. White, M.D., Los Angeles.

A unique foreign body in the male

bladder and the removal by suprapubic cystotomy, by H. O. White, M.D., Los Angeles, and E. Robinson Duff, M.D., Chicago.

The problem of Rocky Mountain spotted fever, by P. A. Surgeon W. C. Rucker, United States Public Health and Marine Hospital Service.

The Rocky Mountain spotted fever tick, with special reference to the problem of its control in the Bitter Root Valley in Montana, by W. D. Hunter, in charge of the Southern Field Crop Insect Investigations, and F. C. Bishop, Entomological Assistant, in co-operation with the Biological Survey and the Montana Agricultural College.

Climate in the treatment of pulmonary tuberculosis, W. Jarvis Barlow, A.B., M.D., Los Angeles.

Observations on a child with a gastric fistula in relation to recent advances in the physiology of gastric digestion, by R. S. Lavenson.

Relation of thigh and leg muscles to malpostures of the feet, by C. L. Lowman, Los Angeles.

The present status of cancer investigation, by Philip King Brown, M.D., San Francisco.

The status of our vaccine work in cancer, P. K. Gilman, M.D., San Francisco.

Three cases of probable cancer transplantation from the use of the Gilman vaccines, by W. B. Coffey, M.D., San Francisco.

Epidemic meningitis in California and its treatment with Flexner's anti-meningitis serum, by Philip King Brown, San Francisco.

The neurotic basis of juvenile delinquency, with a study of some special cases, mostly from the San Francisco Juvenile Court, by Philip King Brown, San Francisco.

Bacterial examination of the stools in suspected cancer of the stomach, by Philip King Brown, San Francisco.

Retrospection and introspection: Our

opportunities and obligations, by H. G. Wetherell, M.D., Denver.

Fracture clamp for open treatment of fractures, by Rexwald Brown, M.D., Santa Barbara, Cal.

The treatment of gonorrhoea in the male, by J. C. Copeland, M.D., Los Angeles.

Interrelation of the ammonia and carbon dioxide content of the blood, by Ralph Hopkins and W. Denis.

Oxidation of the amino acids. II. Alanine and tyrosine, by W. Denis.

The digestibility of white of egg as influenced by the temperature at which it is coagulated, by Philip Frank.

(The three above papers are from the Physiological Laboratories of the Tulane University, New Orleans).

Edward Jenner, the man, by Walter B. Jennings, M.D., New York City.

On what do the hygienic and therapeutic virtues of the open air depend? Henry Sewall, Ph.D., M.D., Denver.

How Charlie got consumption and how he was cured, by Isaac W. Brewer, M.D., Ft. Niagara, N. Y.

General information regarding the Hot Springs of Arkansas, by the Department of the Interior, published at the Washington Government Printing Office, 1912.

Report of the Medical Director of the Hot Springs Reservation to the Secretary of the Interior, for 1911.

An apparatus for the intravenous injection of salvarsan with salt solution preceding and following, by W. B. Dakin, M.D., Chicago.

The evolution of the operating table, by William Seaman Bainbridge, M.D., New York.

Lithopedion, by William Seaman Bainbridge, Sc.D., M.D., New York.

The relation of so-called Brill's disease to Typhus Fever, an experimental demonstration of their identity, by John F. Anderson and Joseph Goldberger. Reprint from Public Health Reports No. 71.

Svapnia

**Purified Opium
With a Fixed
Morphine Standard**

SVAPNIA possesses the following advantages over ordinary opium:

Freedom from mechanical impurities; elimination of undesirable alkaloids; definite morphine content (10 per cent); lessened tendency to nausea and vomiting; increased palatability; uniform results.

The adult dose of Svapnia (1 to 2 gr.), as well as the indications for its use, are the same as opium. It is in the form of red-brown scales, soluble in water with turbidity, and is best administered in capsules, pills or powder form.

Sold by druggists generally.

THE CHARLES N. CRITTENTON CO.

Sole Distributing Agents,
115 Fulton Street, New York.

Sample and literature on application.

Epidemic Cerebrospinal Meningitis, a review of its etiology, transmission, and specific therapy, with reference to public measures for its control, by W. H. Frost. Reprint from Public Health Reports No. 69.

Chapman & Hall, the English publishers of Charles Dickens' novels, report that the order of popularity of these stories, as indicated by their sales, is as follows: 1, "Tale of Two Cities;" 2, "David Copperfield;" 3, "Pickwick Papers;" 4, "Nicholas Nickleby;" 5, "Oliver Twist;" 6, "Old Curiosity Shop;" 7, "Martin Chuzzlewit." The firm sold 750,000 copies of the novels in 1911. On one of them, "The Mystery of Edwin Drood," the publishers still retain a copyright.

ARIZONA MEDICAL ASSOCIATION.

Tentative Program for the Twenty-first Annual Session To Be Held at Bisbee, May 7 and 8, 1912.

Monday Evening, May 6.

Meeting of the Council in the House of the President.

Tuesday Morning, May 7.

8:30 a.m. Registration at Secretary's desk.

8:45 a.m. Meeting of the Council.

9:00 a.m. Meeting of the House of Delegates.

(a) Roll Call.

(b) Reading of Minutes.

(c) Secretary's Report.

(d) Treasurer's Report.

(e) Appointing of Committees.

9:30 a.m. General Meeting.

Address of Welcome. Mayor of Bisbee

Response. Ancil Martin, Phoenix

President's Address.

.....Francis E. Shine, Bisbee

The Annual Essay, "Tuberculosis

a Disease of the Individual".....

.....W. Warner Watkins, Phoenix

"The Sanatorium Treatment of

Tuberculosis".....

Leroy S. Peters, Silver City, N. M.

"Typhoid Vaccine".....

.....Roy Thomas, Phoenix

"Malta Fever and Its Occurrence

in Arizona; With Report of

Cases".....C. E. Yount

and R. N. Looney, Prescott

Title not announced.....

.....E. G. Prentiss, El Paso, Tex.

Title not announced.....

.....R. E. Herendeen, Bisbee

TUESDAY AFTERNOON.

2:00 p.m. Meeting of House of Delegates.

(a) Report of Delegate to A.M.A.

(b) Reports of Councillors.

(c) Reports of Standing Committees.

(d) Reports of Special Committees.

2:30 p.m. General Meeting.

Title not announced.....

.....W. L. Brown, El Paso, Tex.

"Surgical Technique".....

.....Willard Smith, Phoenix

Title not announced.....

.....Harry Reese, Bisbee

"Surgical Treatment of Retro-

version of Uterus".....

.....A. J. Murrieta, Jerome

Title not announced.....

.....E. W. Adamson, Douglas

WEDNESDAY MORNING, MAY 8.

8:40 a.m. Meeting of the Council.

9:00 a.m. Clinics at Bisbee Hospitals.

10:30 a.m. General Meeting.

Title not announced.....

.....The President of the

University of Arizona, Tucson

"Vertigo and Nystagmus".....

.....W. J. Simpson, Phoenix

Title not announced.....

.....E. R. Carpenter, El Paso, Tex.

"The State Board of Health".....

.....R. N. Looney, Prescott

"The House Fly—A Disease Car-

rier." Illustrated with stere-

opticon views.....

.....John W. Flinn, Prescott

WEDNESDAY AFTERNOON.

2:00 p.m. Open meeting of House of Delegates.

(1) Election of Officers.

(2) Appointing of Standing Committees.

(3) Miscellaneous Business.

6:00 p.m. Meeting of the Council.

THERAPEUTICAL HINTS

IDEAL CONDITIONS OF SERUM MANUFACTURE.

If there is one therapeutic agent which, more than another, should be prepared with scrupulous care, that agent is diphtheria antitoxin. Its preparation should never be entrusted to the inexperienced or to those who are hampered by lack of facilities. It should have its origin in the blood of healthy horses—animals whose blood is known to be pure. The welfare of the diphtheritic patient demands a serum from which every element of conjecture is eliminated. In the opinion of many physicians these essentials are best exemplified in the Antidiphtheric Serum of Parke, Davis & Co. Certain it is that

this antitoxin is manufactured under conditions that are ideal. Miles removed from the smoke and dust of Detroit, hundreds of feet above the river level, the company maintains a large stock farm, equipped with model stables and supervised by expert veterinarians. Here, in the best possible condition, are kept the horses employed in serum production. The laboratories in which the antitoxin is prepared, tested and made ready for the market are the admiration of scientific men who visit them.

A PLEASANT, EFFICIENT LAXATIVE.

The desirable qualities of a first-class laxative are efficiency and freedom from

→ Colden's Liquid Beef Tonic

In cases of impaired appetite, gastro-intestinal atony and disorders of digestion due to subnormal secretory activity, Colden's Liquid Beef Tonic

Has Been Found Effective

in arousing the appetite, stimulating the gastric glands, increasing the digestive secretions and the activity, indeed, of all the gustatory organs.

When Anæmia is a complication, Colden's Liquid Beef Tonic with Iron is indicated. Sold by druggists.

Sample with literature
sent to physicians
on request.

THE CHARLES N. CRITTENTON COMPANY, 115 Fulton St., New York

unpleasant taste. The lack of either to just that extent disqualifies the product for use in the treatment of chronic constipation. That it is difficult to find a palatable and efficient laxative in the same medicament is a pretty generally accepted fact. It is possible to do so, however, and Cascara Evacuant may be cited as proof of that possibility. This preparation is pleasant in taste, and in doses of 15 to 30 minims in water it performs its duty quickly and well, without incidental nausea or distress. That is why children rarely object to taking it, and adults prefer it to other preparations.

The product is manufactured by Parke, Davis & Co. and is procurable from any well-stocked retail pharmacy. To avoid confusion with other so-called aromatic cascarias, however, it is well to

specify clearly "Cascara Evacuant, P. D. & Co."

SCARLET FEVER, MEASLES AND CHICKEN POX.

The care of the skin is important. After the appearance of the eruption, the itching, burning and smarting often become quite intolerable and unless relief is quickly obtained, the inevitable scratching may lead to grave skin diseases or serious local infections. Among the measures that have been employed for the successful care of the skin during the eruptive and desquamative stages, there is nothing that has given such complete satisfaction as K-Y Lubricating Jelly. This is a bland, jelly-like substance which possesses remarkable emollient properties. It is non-greasy, has no color, and is water soluble. More

than this, it is absolutely clean and never stains, discolors nor soils the bed clothing, dressings or wearing apparel. In consequence, it can be applied to the skin as freely as may be necessary or desirable, and the patient once, twice or even oftener daily, should be anointed from head to foot. Not only will it afford prompt and effective relief from itching, smarting and burning, but it will also efficiently prevent dissemination of the scales and infectious material. In addition to appreciation of its great value in these important directions, great satisfaction is always derived from its surprising cleanliness. This is always a gratifying detail to the mother or nurse not alone from esthetic standpoints, but from the lessened amount of work entailed in keeping the patient clean and wholesome.

W. B. Saunders Company have just issued a new (16th) edition of their Illustrated Catalogue, which describes some forty new books and new editions published by them since the issuance of the former edition. It is a volume of eighty pages, and the illustrations present a fund of information. The books listed in this catalogue cover much that is of interest to the medical man. The descriptions and illustrations are excellent. This edition also contains an illustration and description of Saunders' new building, now being erected on Washington Square, Philadelphia's new publishing center.

Any physician wishing a copy of this handsome catalogue can obtain one free by addressing W. B. Saunders Company, 925 Walnut Street, Philadelphia.

Battle & Co. have just issued No. 18 of the Dislocation Charts, which completes the set. They will be sent free to physicians on request. Also Fracture and Tumor charts if desired.

IF YOU ARE INTERESTED in utilizing waste for profits, send 5c for a copy of the Illustrated Wood Waste Distilleries News, Wheeling, W. Va.

NEGRO PERCENTAGE DECREASES. ING.

In view of the often reiterated statement that the colored population of the United States is increasing far more rapidly than the white, it is interesting to note what the preliminary statement of the thirteenth census reveals as to the numbers of Caucasians and Africans. In continental United States on April 15, 1910, 88.9 per cent. of the population was white; 10.7 negro. This is the lowest percentage for the black population recorded for many years. In the decennial returns of 1880 it was 13.1, and 11.6 in 1900. The whole white population of the United States today is 87,732,687 against 9,828,294 negroes. From 1900 to 1910 the white race has increased 22.3 per cent., while the colored race has grown but 11.3 per cent. This excess is, of course, largely due to heavy white immigration. The question whether the more rapid increase of the whites could have been maintained if there had been no white immigration, has been roughly answered by the census bureau, which gives the natural white increase as 15 per cent., while the increase among the colored population is set down as 11.2. The difference in these figures, it is hardly necessary to say, is due to the large infant mortality among the negroes, especially in the South.

"Hail! Social Pipe—thou foe to care,
Companion of my elbow chair;
As forth thy curling fumes arise,
They seem an evening sacrifice—
An offering to my Maker's praise
For all His benefits and grace."

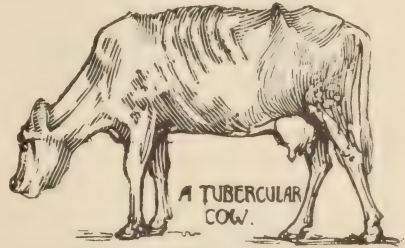
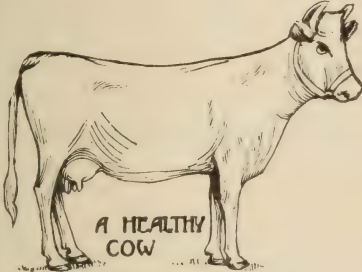
—Dr. Garth.

It is never too late to give up our prejudices.

OUR SENTIMENTS, TOO.

We cull the following from the Monthly Bulletin of the Los Angeles Health Society and reproduce it here to help the good work along:

**From Which of these Cows Do You
Get Your Milk?**



(By Courtesy of Chicago Health Dept.)

If You Don't Know You Should Find Out

"Ask the Health Department to give you a record of your milkman and see that you are not getting raw milk from tubercular cows.

"The coming campaign on the tuberculin test ordinance will be a fight arrayed on one side of which will be the dollars of the organized milk trust and on the other the efforts of the Health Department to secure for the City of Los Angeles a milk supply equal to that of forty-one other progressive

cities of the United States. How will you, as a consumer, cast your ballot?

"The tuberculin test is harmless to healthy cattle, there being hundreds of head in the vicinity of Pasadena that have been tested a number of times, and are in prime condition today.

"Those who fear they have a large percentage of tuberculosis in their dairy herds are usually the ones who fight hardest against the enforcement of the tuberculin test."

QUESTIONS OF THE STATE BOARD OF MEDICAL EXAMINERS, LOS ANGELES, APRIL 2, 3, 4, 5, 1912.

HYGIENE.

1. What conditions, climatic and social, should be thought of in reference to a locality to which you would send a case of pulmonary tuberculosis?
2. What are some of the sequelae of constipation? What hygienic and dietary regimen would you recommend to prevent constipation? What weight of feces should the normal man pass in twenty-four hours?
3. Name three mineral springs resorts in the United States (preferably in California) with brief statement of the special virtues of each.
4. What are the arguments for and against cremation as a method of disposing of the dead?
5. Name three (3) species of tape worm of which man is the host. In what food are they found?
6. Describe hook worm. In what section of the country is it most prevalent? What should be done to prevent it?
7. What is the object and modus operandi of traps on waste pipes? How does sewer gas act inimicably to health? What are the symptoms of sewer gas poisoning?
8. What is the period of quarantine required after the latest exposure to infection in (1) Smallpox (2) Scarlet fever (3) Diphtheria?
9. State the methods by which typhoid fever may be transmitted.
10. Define the meaning of the terms—endemic, epidemic and sporadic.
11. What is the most important requirement that should be made by the State and municipality in order to maintain a pure milk supply?

12. Name four men whose discoveries during the eighteenth and nineteenth centuries did the most toward the protection of the health of mankind.

PHYSIOLOGY.

(Answer Ten Questions Only)

1. What changes take place in the neurone on the central side of a lesion?
2. Discuss the inhibition of reflexes.
3. Give proofs of the existence of sensory nerves in muscles.
4. Describe the (a) accommodation reflex, (b) light reflex of the sphincter pupillae.
5. What are the functions of the leucocytes and under what normal conditions is there a variation in number?
6. From what and how is lymph derived?
7. What causes the tonicity of the heart muscle?
8. Describe the aspiratory action of the thorax.
9. Describe the nervous mechanism of vomiting.
10. What are the functions of saliva?
11. What is the function of the parathyroids?
12. What are the functions of carbohydrate food?

OBSTETRICS.

(Answer Ten Questions Only)

1. What is the (a) primary (b) secondary dangers of ectopic gestation?
2. Discuss the matter of Caesarean section in presence of sepsis or in suspect cases. What other alternatives have you?
3. What is the greatest danger from retained placental remains after delivery?
4. What are the four cardinal points of presentation? Give number into which each are divided.
5. What do you understand by a compound presentation and how would you manage it?
6. Give the number and names of the joints of the obstetric pelvis.
7. In Gonorrhoea or suspect cases what means during labor would you pursue to avoid puerperal infection?
8. Describe the delivery of the shoulders in head presentation where the perineum is threatened.
9. How would you differentiate between septic lymphangitis and septic phlebitis in the puerperal stage?
10. Discuss the matter of craniotomy on living child. When, if ever, are you justified?
11. Give the attachments of the peritoneum to the uterus. What are the other supports of the uterus?
12. Describe the mode of an intra-uterine irrigation following labor, and give conditions justifying or demanding this measure.

PATHOLOGY.

(Answer Eight (8) Questions Only and Identify Four (4) Slides.

1. Of what is pus composed and describe its formation and development?
2. After traumatic injuries name three structures or tissues which are likely to be replaced by normal tissues and three which will be replaced largely or entirely by scar tissue and how will this scar tissue differ from normal tissue?
3. After death from long continued or chronic malarial poisoning what organic changes will be found?
4. Describe the structural or organic changes which take place in the heart as the re-

sult of arteriosclerotic disease of the coronary arteries.

5. What organic changes are likely to result from severe and long continued asthma?
6. How does the condition in bronchial pneumonia differ from the condition found in lobar pneumonia and what differences, if any, in the causes producing these two conditions.
7. Locate and describe the changes which occur in Landry's paralysis (acute ascending paralysis) and name principal causes.
8. Locate and describe the changes in Multiple neuritis and give the principal causes.
9. Describe the changes in the skin in acute and chronic eczema.
10. Discuss the relationship between arteriosclerosis and chronic interstitial nephritis.

GYNECOLOGY.

(Answer Ten Questions Only)

1. How would you differentiate Phlegmanous vulvitis from Pudendal hernia?
2. Pointed Condylomata, Diagnosis, and Etiology.
3. How would you differentiate a small Ovarian cyst from an inflammatory exudation on the broad ligament?
4. What are the methods of replacing the retroverted or retroflexed Uterus when movable?
5. Differentiate impaction of faeces, pelvic peritonitis and cellulitis.
6. What is the pathology of (a) Hydrosalpinx, (b) Hematosalpinx diagnosis?
7. How would you differentiate inversion of the Uterus from a polypus?
8. What are the results of untreated inversion of the uterus?
9. Mention some of the causes of sterility in women.
10. What are the precautions to be observed in the employment of a pessary?
11. A hot vaginal douche. For what is it used, how administered, give technique?
12. What are the symptoms of atresia vaginae?

GENERAL DIAGNOSIS.

(Answer Ten Questions Only)

Do not give Pathology or Treatment unless necessary for Diagnosis.

1. Give the aetiology and symptoms of acute pulmonary oedema.
2. Differentiate hydrocele from inguinal hernia.
3. (a) What may cause enlargement of the cervical lymphatic glands? (b) Give differential diagnosis between any two of these conditions.
4. Differentiate osteomyelitis of a long bone from acute rheumatism.
5. Describe the appearance of the eruption in (a) measles (b) scarlet fever (c) rubella (d) herpes zoster (e) urticaria.
6. Describe manic-depressive insanity.
7. Describe a typical attack of croupous pneumonia.
8. Describe epidemic cerebro-spinal meningitis.
9. (a) What diseases show a low hemoglobin index (b) Give the diagnosis of uncinariasis.
10. Describe a complete method for examination of the chest when pulmonary tuberculosis is suspected.
11. Describe the tuberculin tests. Discuss their value briefly.
12. Define (a) embolism (b) thrombosis. Give symptoms of pulmonary embolism.

ANATOMY.

(Answer Ten Questions Only)

1. Discuss the deep epigastric artery giving its origin, course, branches and principal structures with which it is in relation.
2. Describe the relationship of the bony points of the elbow when forearm is fully extended and when forearm is in extreme flexion.
3. Describe the renal circulation.
4. Give the distribution of the following intercostal nerves, second, sixth, seventh, tenth and twelfth.
5. Describe the azygos veins.
6. Describe the lymphatics of the mediastinum.
7. Describe the popliteal space, giving boundaries, relations and contents.
8. Describe the origin, course and distribution of the phrenic nerve.
9. Discuss the anatomy of the appendix as an etiologic factor in causing appendicitis.
10. Describe the vesical trigone.
11. Describe the internal abdominal ring; (b) describe the external abdominal ring.
12. Give the relations of the common carotid artery in the neck.

HISTOLOGY.

(Answer Eight Questions Only)

1. (a) Name the stages into which the process of karyokinesis is divided. (b) Describe the formation of the acromatic spindle.
2. What features would enable you to distinguish a section made transversely to the tip of the tongue from one made perpendicularly through the skin and subcutaneous tissue of the back of the hand? Make drawings.
3. Describe the histological characteristics of a longitudinal section of the trachea made perpendicularly to the surface of the mucous membrane. Make drawing.
4. What do you understand by the following terms:
(a) neurone (c) axone
(b) dendrite (d) implantation cone
(e) Tigroid granules.
5. Describe the relation that exists between the small stellate and the cells of Purkinje in the molecular layer of the cerebellum. Make drawings.
6. Describe the distribution of the branches of the renal artery in the kidney.
7. Describe a section made perpendicularly through a solitary lymph follicle such as is found in the colon. Make drawing.
8. Name and describe the different varieties of cartilage found in the human body and name a location where an example of each may be found. Make drawings.
9. Name the structures found in the portal canals of the liver. Make a sketch showing the difference in structure, size and relative position.
10. Name and describe the different varieties of white blood cells. Illustrate by drawings.
11. Identify two slides.
12. Identify two slides.

BACTERIOLOGY.

(Answer Ten Questions Only)

1. How is the material obtained which is used to counteract the effect of the bite of a rabid dog?
2. What role do bacteria play in the production of ptomaines?
3. What happens if a rabbit is infected with a virulent culture of bacillus anthracis? Explain in detail.

4. What produces glanders, relapsing fever, plague, osteomyelitis, favus?
5. How does tetanus toxin injected into a muscle produce muscular spasm?
6. Define complement, amboceptor, symbiosis, endotoxin, antigen.
7. State how you would determine the nature of a dysentery. Give detail of findings.
8. How does the hook worm usually gain access to the intestine? Give two ways.
9. Discuss, not over one page, treponema pallida.
10. How would you determine the presence or absence of pathogenic germs in a punctured wound?
11. How do tape worms propagate?
12. How would you distinguish between a case of Tertian malarial fever, and one of Aestivo-Autumnal fever? Describe findings.

CHEMISTRY AND TOXICOLOGY.

(Answer Ten Questions Only)

1. Name and describe the chief compounds of sodium.
2. What reaction takes place when carbon dioxide and limewater are brought together? Give the equation.
3. Give the properties of chlorine. State its source and mention the most important of its compounds that are used in medicine.
4. Describe four tests for ammonia.
5. Give the chemical formula and chemical name of laughing-gas. How is the compound made?
6. How would you combine cream of tartar, baking soda, and cornstarch to make baking-powder?
7. How do you determine whether a given white powder is $HgCl$ or $HgCl_2$?
8. Describe collodion and celluloid.
9. Name the three classes of carbohydrates; what compounds do they include?
10. How is oxalic acid made? What is the antidote for oxalic poisoning?
11. Give two methods for distinguishing tartaric acid from citric acid.
12. What antidote, and in what quantity, should be given for poisoning by iodine? By lunar caustic?

A new German invention, the pulmotor, may be the means of saving many lives. It is designed to resuscitate persons who have been overcome by inhaling gas. The instrument expels the gas from the lungs of the victim and substitutes oxygen, and then automatically establishes artificial breathing until natural respiration is resumed. In one case, a newspaper report states, two miners had been for several hours given up as dead, and were about to be removed to the morgue, when they were entirely resuscitated by the use of the pulmotor.

Bliss was it in that dawn to be alive
But to be young was very heaven.

—Wordsworth.

HOSPITAL DE HERMOSILLO.

Tengo el honor de participar al público que he abierto en Hermosillo, Méx., Calle Rosales No. 25, (cerca del Parque "Francisco I. Madero"), un Hospital Moderno, provisto de útiles y aparatos completamente nuevos, importados directamente de los Estados Unidos y de Europa. Este Hospital se llamará "Hospital de Hermosillo" y estará atendido por una administradora competente contratada en California, y servido por enfermeras recibidas en los Estados Unidos. Anexo al Hospital se encuentra una instalación completa de Rayos X y un laboratorio químico y microscópico para diagnósticos clínicos. Se atenderán con especialidad los casos que requieran tratamiento quirúrgico, para lo cual se cuenta con una sala de operaciones construida expresamente y con un nuevo y moderno arsenal. Como garantía para el público no se recibirán enfermos que padezcan enfermedades contagiosas.

DR. BIM SMITH,

El día 1° de Noviembre de 1911.

Hermosillo, México.

Teléfono 121.

CALIFORNIA HOSPITAL ALUMNAE NOTES

The regular monthly meeting of the California Hospital Alumnae Association was held Monday, March 25, at the Directory Rooms, 1103 West Eighth street. The President and Vice-President being absent, Mrs. E. P. Durbill was appointed to fill the chair. Three names were voted on and elected to membership. It was reported that the Sick Benefit Fund was growing satisfactorily, but the chairman of the committee being absent, no real report was given. Miss Hilda G. Humphries was elected delegate to the National Associated Alumnae Convention to be held in Chicago June 4, 5 and 6; Miss Kent, alternate. After the program, refreshments were served by Miss Middleton.

Word has been received here of the death of Mrs. Clarence De Witt at Santa Maria recently. Mrs. De Witt

was Miss Goodehild, class '06. This will come as a great shock to the members of the Alumnae.

Miss Palm, who has been in Ventura recuperating from an operation for appendicitis, has returned to Los Angeles, where she is doing private nursing.

Mrs. C. M. Stunzel has resigned her position as Superintendent of the Copper King Hospital in Bisbee, Ariz., to take charge of a training school in San Diego.

Mrs. Wardell, nee Ruth Arnold, of Seattle, has taken an apartment at the Duke Apartments, corner Seventh and Carondelet streets, in this city. She expects to remain here some time.

Mr. and Mrs. Saur, nee Rachael Santa Maria, have gone to St. Louis to make their home.

"in the treatment of muscular cramps, hot applications according to S. Solis Cohen, lessens the excitability and energy of the voluntary muscles and relieves the excruciating pains accompanying these attacks.

In neuralgias as shown by Du Bois Raymond, where there is compression of the nerve trunk by the over filling of blood vessels in contiguous areas, hot applications relieve the congestion and pain by diversion of the blood to other parts.

In the use of hot moist heat as a therapeutic agent in the treatment of muscular spasms and neuralgias, antiphlogistine seems to be particularly indicated. It relieves muscular tension, stimulates capillary and arterial circulation, thus removing the congestion and its accompanying pain.

Antiphlogistine is the most convenient, sanitary and satisfactory method of applying hot moist heat. It retains its thermic value for hours, a feature of recognized importance in the treatment of inflammatory and congestive conditions."

Miss Carlson is taking up massage with Mr. Matson.

Miss Clare Hardison has returned to this city after an extended stay in Sacramento.

Miss Bessie Miller is nursing in Lima for a time.

Miss Gage is reported as being much improved. We are eagerly looking forward to the time when she will be again with us in the active work.

Miss Edith Thomas is in our city visiting.

Miss Alice Maud Dougherty, '09, was married March 6th in Christ Episcopal Church at 5 p.m. to Mr. David Hopkins. Miss Emily Richards and Mr. John Baker stood up with the bridal pair. Dinner was served at the Alexandria Hotel. They left by boat for San Francisco on Friday. Mr. Hopkins is purchasing agent for some of the mining companies of Jerome, Arizona, where he and his bride will reside after May

1st. We extend our heartiest congratulations.

Miss Waller, Supt. of Ventura Hospital, has been visiting in Los Angeles for a short time.

Miss Sallie Cartmell, who has been in a hospital in San Jose for some time, has returned to take up private work in this city again.

Miss Ethel Green has returned from a trip through the Eastern States.

Smoking: "A custom loathsome to the eye, hateful to the nose, harmful to the brain, dangerous to the lungs, and the black, stinking fume thereof nearest resembling the horrible Stygian smoke of the pit that is bottomless."—James I.

France will spend \$4,400,000 on aviation for its army during 1912. By the end of the year 344 military aeroplanes will be in use.

H. H. SHUTTS

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DR. H. BERT ELLIS.

SOUTHERN CALIFORNIA PRACTITIONER

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No. 5

Editor,

DR. GEO. E. MALSBARY.

Associate Editors,

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ETHYL CHLORIDE AS A GENERAL ANAESTHETIC.

CECIL E. REYNOLDS, M.R.C.S., L.R.C.P., D.H.P., C.A.M.B., LOS ANGELES,
FORMERLY HALF-TIME SCHOOL DOCTOR TO LONDON COUNTY
COUNCIL; LATE WHOLE-TIME SCHOOL DOCTOR TO
THE BERKSHIRE COUNTY COUNCIL.

During my term of office as anaesthetist to the Central London Throat, Nose and Ear Hospital, in 1906, it fell to my share to administer in about thirty cases per day ethyl chloride as a general anaesthetic. The aggregate number of ethyl chlorides thus administered by the other anaesthetists to this hospital and by myself amounted to many thousands in the year, but I never heard of any serious accident. Nevertheless, I was early struck with certain spasmodic phenomenon associated with the use of this drug. Irregularity of respiration and tonic contraction of the limbs, with or without slight cyanosis, was not uncommon during induction and during recovery, and as the details of this phenomenon differed from that seen occasionally during the use of other anaesthetic agents, but most resembled nitrous oxide in its action, I gave it a good deal of attention.

On looking through the literature on ethyl chloride in the Library of the Royal Society of Medicine, it appeared to be very scanty compared with the work done on chloroform, but at that time Embley & Martin's paper on chloroform had been published, but not their paper on ethyl chloride.

One day, however, I strolled into the outpatients' department of University College Hospital in time to witness a prolonged administration of ethyl chloride, and what I saw was quite different from any complication of administration in my experience. The man was fully under ethyl chloride and the operation commenced. The patient's pupils were three-fourths dilated and his color good. Respirations were quite automatic, free, deep and quick. But when the anaesthetist, whom I knew to be an able man, sprayed into the bag an additional 5 cc of E. C., in response to a change

in the respirations, the patient's respirations became shorter and shorter and more intense. The arms were flexed tonically at elbow and shoulder. The extensors of the spine became contracted and he very soon was in a state of tetanic opisthotonus, with the thorax fixed in a position of full inspiration and the jaws tightly clenched. He became so cyanosed as to give rise to anxiety, and the anaesthetist, though powerfully built, was quite unable to either open the mouth or to compress the chest with any apparent effect. Fortunately, he had withdrawn the anaesthetic at the first onset of spasticity and by dint of persistence the teeth were forced apart sufficiently to allow successful artificial respiration.

It was somewhat impressive because the picture was so original and within a few weeks I had seen two more such cases in milder degree.

Accordingly, as I was administering this drug so often myself, I thought it time to consult my former teacher, Dr. Dudley W. Buxton, President of the Society of Anaesthetists of London, as to the following points:

Was the phenomenon due to

1. Asphyxial element of method of administration.
2. Toxic action of ethyl chloride pure and simple.
3. Blood pressure effect on central nervous system.

Dr. Buxton's reply was to depute me to carry out some physiological experiments to determine these points, and I experimented on some forty dogs, cats and rabbits in the laboratory of Prof. Ernest Starling.

I regret that I have not the protocols with me to illustrate.

The ethyl chloride was administered to the animals by means of a tracheotomy tube from a gasometer in which I could have ethyl chloride and

air in definite proportion; ethyl chloride and oxygen in definite proportion; ethyl chloride and carbondioxide in definite proportion. The preliminary tracheotomy was performed, sometimes under morphia and sometimes under ether in order to avoid a morphia or ether fallacy. A respiratory tambour communicated the movements of respiration to the blackened paper roll, and the usual mercury manometer with writing pen attached was connected with the carotid artery. Thus a graphic record was obtained of all slight variations of respiration and blood pressure.

The net result of these experiments was that I found that:

1. The spasms of induction and recovery were absent. I therefore concluded that they were functional in the human subject.

2. An asphyxial element with a very low percentage of ethyl chloride did not give the clinical picture of inspiratory spasm that I had witnessed that day in the outpatients, but gave the picture of asphyxia up to the stage of convulsions, i. e., clonic not tonic.

3. That with high percentage of ethyl chloride one always got a fixed inspiratory spasm with as a rule tonic contraction of all the limbs lasting a considerable time (often about a minute) and immediately followed by a rapid fall of blood pressure and death; there was an initial rise of blood-pressure early in the spasm.

4. That the simultaneous administration of oxygen did not prevent this condition of inspiratory spasm, neither did it affect the fall of blood pressure.

5. That the smallest percentage in which this spasm was obtained was sixteen per cent. (16%) of ethyl chloride in air.

6. That I was lucky if I resuscitated the animal after the spasm commenced to relax.

So that I arrived at the conclusion that the unusual phenomenon was the direct toxic result upon the central nervous system of ethyl chloride and that it was a terminal symptom. That the element of asphyxia would only aid in its production, because diminished elimination of a drug is tantamount to accumulation in the blood. That in the human being it would require some considerable experience to know instantly that any given spasm was of the functional or of the toxic type.

Patients come around from ethyl chloride so quickly and the corneal reflex is rather unreliable with this drug so that many an anaesthetist without special knowledge of ethyl chloride might be inclined to regard the irregularity of respiration toxic in character as a sign of returning consciousness, especially as most people keep a very good color under the anaesthetic, and

push the drug instead of withdrawing it, which is precisely what occurred in the "Star" case I have referred to. Judging from my dogs and rabbits, that man had a narrow escape.

Nevertheless, ethyl chloride is a very convenient anaesthetic for emergencies and ideal for nervous patients since they are unconscious before they have time to worry, and much mental anguish is saved. It is certainly less toxic than chloroform, and I believe that with experience it can be made absolutely safe. I do not contend that spasm is an invariable terminal sign, but it is a good danger signal that chloroform does not provide. 5 cc is sufficient for an adenectomy in children.

Dr. Buxton defrayed the expenses of the work that was handed over to him. I believe that a recent paper by Embley & Martin fixes the toxic dose at 20%.

"A FEW REMARKS ON THE LOS ANGELES COUNTY HOSPITAL TUBERCULOSIS PROBLEM."*

BY C. H. WHITMAN, M.D., SUPERINTENDENT OF THE LOS ANGELES COUNTY HOSPITAL.

The problem of caring for the tuberculosis patients at our County Hospital is beginning to be a very serious one. Two years ago a new pavilion for tuberculosis patients was completed at a cost of over \$50,000; the capacity of the building being 120 beds with room on the porches for about 75 beds. At the present moment not only every bed in the wards are occupied, but all the porch beds as well. In addition to this there are 29 extra beds in the wards, which fill the aisles and every available place. We may be able to get through the season this year, but before another winter, additional quarters will have to be provided to take care of the ever in-

creasing number of indigent sufferers of tuberculosis. We will soon be crowded for ground room at the County Hospital, and as the county owns some land in the foothill country, at or near San Dimas, I have thought it might be a good plan to urge the Supervisors to set aside sufficient ground there and to build cottages and open a County Sanitorium for this class of patients. I have discussed this matter with a number of physicians and they seem to think it would be a good thing to do. I have also talked with the Board of Supervisors concerning it and I think they would need little urging to take up the matter and put it through. Some of you may feel that if the county

*Read before the Los Angeles County Medical Society, March 15, 1912.

was to establish a Sanatorium of this kind, that it would attract consumptives from other sections of the country, who were not residents of this county, but I do not believe we should entertain a thought of that kind for a moment. It is true that Los Angeles county is already burdened with indigent tubercular sick, but we are a wealthy community and those of us who are privileged to live here owe something to the rest of mankind who are less fortunately situated. The climate of Southern California attracts invalids, many of whom possess barely enough money to buy their transportation here and if unable to work or to find employment, they immediately become county charges and must either be housed and fed by the county or furnished with transportation and returned from whence they came. The expense attending the sending of these people to their homes is no inconsiderable item. It is my belief that we could prevent imposition by establishing a time limit as to length of residence in the county. We would, of course, have to keep the last-stage cases at the County Hospital just the same, and no time limit as to residence can apply to them, as helpless suffering humanity must be taken care of whenever and wherever found.

Physicians have in recent years been instrumental in creating in many parts of Europe and in the United States, so-called State, County or Municipal Sanatoria for the exclusive treatment of patients suffering from pulmonary tuberculosis. These institutions were created by funds of the State or Municipality. City, State, County and Federal governments, should work in harmony if tuberculosis is to be effectually combated.

The first Sanatorium in the U. S. was established by the Commonwealth of Massachusetts in 1898, situated near the center of the State, open to residents of Massachusetts only. The uniform charge is \$4 per week. There are now many

other States which have followed Massachusetts' example in this matter, viz.: The District of Columbia has established a Tuberculosis Hospital for indigent consumptives, capacity 120 beds, no charge to patients. Iowa State Sanatorium for the treatment of tuberculosis, opened 1908 for treatment of incipient cases, capacity 80 beds, rates \$30 per month for those able to pay, otherwise expenses are paid by the State. Maryland—"The Maryland Sanatorium"—opened 1908 for all classes, capacity about 100, scheme provides for 250. Rates, 50c per day, free cases received upon approval of trustees. Michigan—"Michigan State Sanatorium"—for incipient cases only; rates \$7 per week, indigents, State and County charges. In addition to those just mentioned, at least nine other States have established State Sanatoria, viz.:

Minnesota,
Missouri,
New Jersey,
New York,
North Carolina,
Ohio,
Pennsylvania,
Rhode Island,
Vermont.

There are undoubtedly other States now who have these Sanatoria. Every State should have them and especially our own, California, but it takes a long time to get appropriations through our Legislature, especially if the call emanates from the regular medical profession.

In the meantime, I can see no valid reason why this county should not utilize land which they now own for a County Sanatorium to care for first and second stage cases and take both indigents and pay patients, as the different State Sanatoriums are doing.

Entrance to such County Sanatorium could be through the County Hospital and County Charities Office, just as County Farm or Almhouse patients are

handled now. All who could do so would pay something for their care, but those who were able to pay the prices charged by the private Sanatoriums would not be admitted, as we would not want to enter into competition with any private enterprise.

I trust we may succeed in establish-

ing such a County Sanatorium either at San Dimas or at some other favorable location.

I hope as many as are interested in this subject will give expression to their ideas here tonight, for I should like to hear and be made to see all sides of the subject.

THE RELATION OF CERTAIN PATHOLOGICAL CONDITIONS OF LIVER AND GALL BLADDER TO LIFE INSURANCE.*

BY C. W. PIERCE, M.D., LOS ANGELES, MEDICAL DIRECTOR OF THE FRATERNAL BROTHERHOOD.

In the selection of insurable lives one is confronted with problems which, at first glance, might seem insignificant, yet, upon their solution depends the class of risks accepted, and the answer to the problem may not be found until years afterwards, when we take account of the death loss.

The Society for which I have the honor to be Medical Director insures both men and women, and our experience has been that a large number of exposures die each year from diseases of the liver and gall-bladder, the majority of the male risks developing cirrhosis, and the female risks, gall-stones, cholecystitis and cancer.

A large percent of medical men today examine, in some capacity, for life insurance companies, or have in times past, and are, therefore, presumably more or less interested in insurance companies' experience with certain classes of exposures, for their experience reflects with vital force upon all members of the medical profession, hence we trust this paper may be of some interest to us all.

We, of course, realize that no one can absolutely say that one particular risk will die of a certain specific involvement and that another will die of a different specific disease. However, from

our experience in the past, and in the light of knowledge gained from noted investigators, we are enabled to assume, with considerable degree of accuracy, what to expect in a certain percentage in any certain class of exposures, even assuming that at the time they presented themselves to the local examiner, they were apparently free from any physical defect. Our knowledge gained from the postmortem room and the operating table should be of value to an insurance company in safeguarding them from payment of heavy death losses, for the simple fact of our knowing that a certain pathological condition did exist and was responsible for the death, will avail the company nothing. Locking the door after the horse is stolen does not bring back the horse.

Is there any line of demarcation between applicants relative to their probability or not, of developing liver or gall-bladder trouble? We will take it for granted that there is, and hence we are reviewing the subject briefly in this paper. In our study of the topography of the liver, we find the lower surface concave and irregular in outline, and in contact with the anterior and posterior surface of the stomach in the region of the lesser curvature, the upper

*Read before the Southern California Medical Society, San Diego, December 6 and 7, 1911.

part of the duodenum, the transverse colon and the hepatic plexure of the colon, as well as the right kidney and adrenal. Only when the left lobe is enlarged does it extend as far as the spleen. With this extensive relationship with so many important structures, any serious disturbance in any one of these organs may, of course, affect the liver, and vice versa. We look upon the custom of the Chinese women binding their girl babies' feet in such a manner that they cannot grow and develop, as barbarous, and however cruel this may seem, it does not vitally affect the health of the child, or the vitality of her mature years. If our women of civilized lands would confine their efforts to retard the development of a child's growth to the child's feet, we would experience a much healthier condition among our women than we find today, for statistics show that the great majority of women have a deformity of the liver due to tight clothing worn during the developmental stage, and that this deformity, as will be shown, is a responsible factor, no doubt, for a great share of the difficulties developing in the liver and gall-bladder in women in after years. This deformity has been termed "corset liver." The substance of the liver is ordinarily soft and plastic, and the shape of the organ is dependent upon the mould of neighboring structures, particularly of the muscular and bony tissues. Quincke says regarding "corset liver," "It is not produced by lacing alone, but may be the result of various tight-fitting clothing, particularly at the time of life when the body is not developed and the thorax is soft and pliable, and in order that they exercise their effect, these influences must act for a long time." These articles of apparel, he notes, "influence the shape of the liver only in small part through the abdominal walls, but in much greater part they act through pressure on the ribs and cartilages, by modifying the relative position of these parts and re-

tarding their growth." Lue found in 3484 autopsies, on subjects above sixteen years of age, "corset liver" in 1.9% of male bodies and 25.3% in female bodies. The liver may be so elongated from narrowing of the thorax, that it protrudes considerably below the costal arch, and it has been pointed out that this condition may simulate an enlargement, but the differentiation would be the elongation of the right lobe. The same author declares that "tight lacing and tight clothing, in addition to producing deformities of the liver, cause a large number of disturbances in other organs," so we are almost justified in speaking of a "corset disease." Some of the lesions of this condition are the formation of gall-stones, with colic, inflammation and carcinoma of the gall-bladder, distention of the gall-bladder and perihepatitis. Other organs of the upper part of the abdominal cavity may be affected by lacing, as follows: abnormal mobility and dislocation of the right kidney, ptosis of the stomach, diffuse stasis in the portal system as the result of the compression of the liver, and, following this portal stasis, intestinal catarrh, hemorrhoids, attacks of colic and constipation, the latter probably due to the pressure exercised upon the ascending and descending colon, therefore, we, as medical men, should not only combat the corset, but all forms of tight clothing, especially while the body is in the stage of development. The skirts should be lighter and suspended from the shoulders. The principal function of the liver cells is to, in some manner, bring about changes in the hemoglobin of the blood. Neusser says, "In spite of numerous researches and statistics, even the most vital questions in cholelithiasis, such as the question of jaundice, and the mechanism of gall-stones have not been completely elucidated, and the etiology of gall-stones is still obscure." But as regards treatment he says, "The surgeon has the weight of authority,

but he, even, may some day be surprised by the discovery of anti-bacterial serum which will render gall-stones inert, and the operation for radical extirpation will meet the same fate as did tracheotomy in true diphtheria." As regards the etiology of gall-stones, many observers regard cholelithiasis as a constitutional affection, "a link in the chain of that diathesis whose family tree is arthritis," for we find gall-stones occurring in families in which also is elicited a history of obesity, gout, diabetes, hemorrhoids, eczema, rheumatism, etc. The majority of observers today are inclined to believe that infection by means of the circulation or from the intestines is responsible for the nucleus about which cholesterol forms, for typhoid bacilli and bacterium coli have been found in stones. As regards the probable condition responsible for the precipitation of cholesterol, which forms the basis of all gall-stones in man, there are many theories exploited. Neuser says that "thus far there has been no investigation made of hemoglobin in regards to its solubility, its power of crystallization, its faculty of coagulation, or its hygroscopic relation," and states that it is possible that the hemoglobin of gall-stone patients is different from that of a normal person. Such individuals may, perhaps, secrete a bile which crystallizes very readily, similarly as the patient with the urate or oxalate diathesis, who, without showing symptoms intermittently, excretes uric acid or calcium-oxalate crystals in his urine, especially if to this congenital or acquired abnormality in the quantitative composition of the bile, we add mechanical stasis, "corset liver," obesity, pregnancy, large abdominal tumors, etc. It is easy to conceive that, similarly, as when uric acid stones are formed here also, an agglomeration of cholesterol precipitate may result in gall-stones, and in this sense, cholelithiasis might be regarded as a diathesis of the tissues. Naunyn thinks that it is possible that

the liver cells instead of the blood may be affected, and in their decomposition they furnish cholesterol. Where the most scientific men fail to agree, who shall decide? It will, for the present, as Neusser says, remain a mooted question as to the cause of the precipitation of cholesterol in the gall-bladder and ducts. However that may be, we are very clear as to some of the factors causing stasis of the bile, especially in women. We have, as has been shown in the first place, 25% of women with a deformed liver to begin with, and accompanying it disturbances in nearly all the abdominal viscera. Two other important factors, we find, are pregnancy and abdominal tumors, the first the natural inheritance of women and the latter, of course, predominating in women on account of neoplasms developing in connection with the uterus and its appendages. Schroeder examined one hundred and fifteen bodies of women who died during the sexual period, and who had been suffering from gall-stones. Among these ninety-nine had positively been pregnant at some time, and in eleven only could pregnancy be definitely excluded. It has been pointed out that pregnancy and abdominal tumors have a two-fold effect on gall-stones, for on the one hand the increased abdominal pressure present in these conditions favors the formation of gall-stones, and on the other, the pressure exercised in the gall-bladder favors the expulsion of gall-stones that are already formed. As soon as the great abdominal pressure is relieved by the delivery of the child or the removal of the tumor, the gall-stones will enter the narrower portion of the ducts, whereas, previously they were located in the wider portions filled with bile. In our own practice, we operated upon a woman the second day subsequent to childbirth, and removed several hundred gall-stones. She gave a history of having had quite a severe gall-stone colic at a previous childbirth, consequently she must have had some stones

for a long time, but as the bladder was distended to such an enormous extent at the time we operated, our deductions were that this condition had not existed for any great length of time, but that a large number of them must have accumulated during her last pregnancy, and so long as the pressure existed she suffered no inconvenience from them, but as soon as the pressure was relieved at the birth of the child, the stones entered the cystic duct, and she was seized with an uncontrollable gall-stone colic. Incidentally, an interesting feature of this operation was that the patient's daughter was nursing her own baby at the time, and, therefore, took care of the infant brother and nursed it until her mother was subsequently able to nurse it. Carcinoma is the most important neoplasm affecting the gall-bladder. It is only very rarely secondary; that is, proliferating into the gall-bladder from neighboring organs. We are impressed by the frequency with which stones and cancers are associated together in the gall-bladder. There seems little doubt but that cancer is in nearly all cases the direct result of irritation produced by gall-stones. Courvoisier found gall-stones simultaneously with cancer of the gall-bladder in about ninety per cent of all cases. Riedel assumes that about ten per cent. of all patients suffering from cholelithiasis subsequently acquire carcinoma. It is stated that, approximately, cancer is found in females five to seven times more frequently than in males, and about the same rate exists as regards gall-stones. In the matter of diagnosis there are two or three points we would mention as seeming to us quite important. One diagnostic point often referred to as Courvoisier's symptom, is, briefly, that in gall-stones one finds a contracted gall-bladder, and in dilatation an occlusion of the choledochus. Kraus, who has made a very exhaustive study of this subject, says that no actual pathognomonic importance can

be attributed to the Courvoisier symptom. In cholecystitis there is said to be found a leucocytosis in all infected cases except those due to typhoid fever, and in fifty per cent. of the latter. We have demonstrated this fact in several of our own cases, and in one particular case which simulated cancer of the abdominal viscera and had been so diagnosed, we found a leucocytosis of 17,000, operated and found a perforated gall-bladder, one large stone embedded in a mass of inflammatory exudate. Another point which we found existing and which Neusser mentions, that albumen and casts nearly always coexist with gall-bladder infections. The character of the pain is diagnostic. Pressure over a tender gall-bladder invariably elicits a pain referred to the epigastric region. "Chronic interstitial hepatitis" is a chronic inflammation of the liver which interests us from an insurance standpoint, for it is to a great extent preventable. About one-third of all cases of hepatic cirrhosis are due to immoderate use of alcohol, and we find about three cases among men to one among women. Some have demonstrated fairly conclusively that alcohol is not a factor, but Brauer readily demonstrated the presence of alcohol in the bile, besides quite decided amounts of albumin. This must necessarily irritate and damage the hepatic cells. What may be a poisonous dose of spirits to one man may prove harmless to another. As Stadle mann of Berlin says, "One person on a moderate daily amount of alcohol is attacked with hepatic cirrhosis, another worships Gambrinus, Bacchus, and the god of alcoholic spirits and goes unpunished all his days." To recapitulate, therefore, first we find a large class of risks suffering from gall-stones, inflammation of the gall-bladder and cancer. These pathological changes predominate among female risks. Have we, as medical men, any power to lessen the severe death loss among women from these diseases? Sec-

ond, "Chronic interstitial hepatitis" prevalent among men, admitted to be caused in a large percentage of cases by the immoderate use of alcohol. What can insurance companies do to protect themselves from this class of risks? In the first place, we, as examiners and practitioners, should be more alert to detect and advise proper relief from

these conditions; and in the second class, I know of no relief except to demand a re-examination every certain period and eliminate those who are degenerating as the result of immoderate use of spirituous liquors.

608 Wright & Callender Bldg.

Medical Director The Fraternal Brotherhood.

THE PRINCIPLES AND PRACTICE OF SPONDYLO-THERAPY.*

BY ALBERT ABRAMS, A.M., M.D., OF SAN FRANCISCO.

Mr. President and Members of the Association: Your President has just announced that I am to read a paper. For or not doing so, I crave your kind indulgence, but will trust to the inspiration of the moment for the development of my subject. Preliminarily, I wish to express my appreciation for the honor which you have accorded to me. Coincident with the receipt of your invitation, I also received one from Sir James Barr, President of the "British Medical Association," to participate at the next meeting to be held at Liverpool.

I regard your honor as equally great inasmuch as it is less difficult to gain recognition from strangers than from your colleagues among whom you reside.

When the first edition of my book on Spondylotherapy was published nearly two years ago, it was a pioneer effort and only the cognoscenti could correctly interpret its significance. Occasionally, a reviewer has sat in the scorner's seat and hurled the cynic's ban.

"There is a principle which is a bar against all information, which is a proof against all argument and which cannot fail to keep a man in everlasting ignorance; this principle is contempt prior to examination."

Those "in authority" who regard innovation from the view-point of heresy recalls the satire of Molière: "The authorities exact an oath from medical candidates never to alter the practice of physic." I also recall the *bon mot* by a witty compatriot of Talleyrand, who, in commenting on the conservatism of the latter said, if Talleyrand had been present at the creation he would have exclaimed: "Good gracious! Chaos will be destroyed."

"The Journal of the American Medical Association" conceived the following analysis of my work on Spondylotherapy:

"One wonders whether this is an attempt to explain osteopathy and chiropractice to the understanding of the regular practitioner or to exploit the very ingenious percussion devices of the author, or whether it is really true that medical men really know practically nothing about the cure of disease through treatment of the spine. Let us hope that it is the latter, and that a careful study of this unique volume may open new avenues of therapy heretofore undreamed of."

Now, osteopathy is a system which concerns itself with anatomic abnormal-

*Abstract of an address delivered before the Los Angeles County Medical Association, March 1, 1912.

ities and their correction. "Its nosology is a lesion, its symptomatology a sub-luxation."

Chiropractice presumes disease to emanate from displaced vertebrae.

The *spinal centers* are referred to in osteopathic and chiropractic text-books, "with a dogmatism and certainty begotten of beneficial results."

Spondylotherapy concerns itself only with the excitation of the functional centers of the spinal cord by different methods, which may be executed and demonstrated with the same certainty in the living human subject as is done by the vivisectional experimentalist.

This phase of medicine I have neologized as *Clinical Physiology*. Thus human, and not animal physiology, is made the basis of clinical physiology.

In this way one has disproved by clinical observations many apodictic data created in the laboratory.

Pavloff, the eminent physiologist, contends that the physician gives a more correct verdict concerning physiologic processes than the physiologist himself.

The pathology of spondylotherapy is founded on clinical physiology and its methods embrace the therapeutics of the reflexes.

Do not for a moment delude yourself into the belief that spondylotherapy is the exploitation of a fad or an exclusive system.

Some of my enthusiastic proselytes have arrogated to me the questionable honor of having created a new system of medical practice.

No system can exclusively pre-empt the field of therapeutics which is a composite practice.

If my work is that of an innovator, I have created no discontinuity in the transition to new knowledge.

All of my clinico-physiologic investigations have been rigorously controlled and are free from the inaccuracies of enthusiasm. Cure, to the scientific investigator, signifies nothing unless the

therapeutic results can be controlled by demonstrable evidence.

For this reason my formulated conclusions in spondylotherapy have been consigned to conservative judgment and accurate observation and not to the imagination in accounting for the remarkable results achieved by a correct practice of spondylotherapy.

I devoted many years to the study of *reflexes* before I permitted myself to publish a single therapeutic observation. My original work concerned itself with a study of the vertebral reflexes. Even the laity know that cold applied to the back of the neck may arrest a nasal hemorrhage and that heat applied to the small of the back may hasten menstruation.

The profound and far-reaching physiologic truths which underlie these simple phenomena have either been ignored or only been given inconsiderate attention.

Others, less scientific but more astute, have determined empirically that manipulation of the spine does sometimes cure conditions that have failed of cure in the hands of experienced physicians.

So it has come to pass that schools of practice exploiting spinal manipulation as a cure-all have arisen and neither the fury of tongue nor the truculence of pen can gainsay the confidence which these systems of practice have inspired in the community.

In a recent address before the twelfth "Congress of Medicine" at Lyons, the eminent Parisian clinician, Jaworski, has referred to my methods as "*Vertebral Reflexotherapy*" and he affirms that, "some of his results and those of his colleagues by the methods of spondylotherapy were positively miracles."

Spondylotherapy concerns itself with the therapeutics of the reflexes.

Many reflex acts are so perfectly coordinated that one is constrained to believe that in the spinal cord there exists a subsidiary brain.

Man is practically an automaton and many of the phenomena of vegetative life, respiration, circulation, nutrition, etc., are produced in the subconscious state and without voluntary effort. Eating, drinking, walking, in short, the essential acts of life, are but a mass of habits, and eventually conform to the laws of habit. Their repetition eventuates in reflex actions. It is wise that this is so, otherwise the mind would be so occupied that acts requiring volitional deliberation could not be executed. Instinct is an adaptive impulse in the absence of intelligence, yet instinct is made up of reflex acts purely automatic and without the domain of the mind.

The bee constructs a perfect cell without a mathematical education, and birds migrate without chart or compass.

All diseases are manifested by a direct and indirect symptomatology; the latter embrace the reflex symptoms. There are individuals who are reflexophilic, *i. e.*, they have exaggerated reflexes.

When the oculist contracts or dilates the pupil, he employs reflexes in treatment. Thus, in iritis the most important remedy is atropin, because among other effects, the eye is put at rest, owing to paralysis of the sphincter.

Pharmacology and physiotherapy are unconsciously utilized in inhibiting or exciting reflexes to cure disease.

Surgery has already invaded this field in the treatment of spasticity by the operation known as rhizotomy, *i. e.*, resection of the posterior spinal roots. Here, the object is to inhibit afferent impulses from the muscles which excite the cells of the anterior horns of the cord to send out excessive motor reflexes to the muscles.

I shall not dwell on the importance of clinical physiology in solving many problems which have heretofore baffled the physiologist. I have demonstrated that the tendon reflexes are of central and not of peripheral origin; that the

Babinski reflex may be evoked in the norm; that there are specific cutaneous nerves, etc.

Just let me cite the importance of one of many reflexes in diagnosis.

By tapping the seventh cervical spine, one contracts the aorta and conversely dilates it by tapping the tenth dorsal spine.

A prominent attorney consulted at least twelve of the foremost diagnosticians of Europe for an intractable cough, each of whom made a different diagnosis. At last he went to the famous Kocher, in Bern, who diagnosed a spinal tumor. This latter diagnosis was only made after repeated examinations.

Returning in despair to San Francisco one could note the shadow fluoroscopically approximating the spine which was interpreted as a tumor.

When the seventh cervical spine was concussed, the shadow contracted and conversely dilated when the tenth dorsal spine was concussed.

Such variations in area could only be produced by a dilated aorta and by nothing else, hence the diagnosis which was confirmed two weeks later by cure of the cough which had lasted for months.

Practically every viscus of the body can be made to contract and dilate by application of an appropriate stimulus to definite vertebral regions. I can positively affirm that by spondylotherapy a specific method or treatment has eventually been found for the symptomatic cure of aneurysms and exophthalmic goitre.

The methods are so simple that you can hardly credit my asseverations, but it is a psychologic fact to which even the physician is not immune, that, what is obvious can hardly compete with what is obscure in the treatment of disease.

The most mystifying phenomena rest upon the least complex causes; and the

simpler a thing is, the harder it is to understand.

Do not imagine that concussion means vibration. Years of investigation demonstrated the inefficacy of the latter and furthermore that the character of the shocks modifies the results. In this way I have duplicated in many ways the work of the physiologist.

If, for instance, one stimulates the anterior root of the eleventh thoracic nerve, vasoconstrictor effects are noted in the renal blood vessels with rapid shocks and vasodilator effects, with slowly interrupted shocks.

In spondylotherapy, I have utilized drugs to the full in diagnosis and treatment and the fundamental fact was established that, pilocarpin stimulated the vagus system and adrenalin the sympathetic system. The former drug had therefore a vagotropic and the latter a sympathicotropic action.

This drug action may be duplicated by spondylogologic methods.

Permit me to illustrate by the citation of a method which unfortunately was developed too late for insertion in the third edition of my book on spondylotherapy.

We may duplicate the action of adrenalin on the blood pressure and the visceral reflexes by application of the sinusoidal current between the second and third cervical vertebrae. The latter point corresponds to the exit of the phrenic nerve. This nerve by its phrenico-abdominal branches supplies the suprarenal glands.

Thus, two important facts have been established: 1st, the physiological fact that the secretion of the suprarenal glands may be augmented by stimulation of the phrenic nerve.

2nd. A clinical fact that we are in possession of a physio-therapeutic method in suprarenal insufficiency.

I should like to tell you how it is possible to anesthetize by concussion practically any region of the body and how this fact may be utilized in the treatment of neuritis and other affections, but having exceeded the time already permitted, I must bring my desultory remarks to a close so that I may demonstrate before the X-rays several reflexes notably the aortic reflexes in a subject with an aneurysm of the thoracic aorta.

COMPLETE OUTWARD DISLOCATION OF THE ELBOW.

BY R. O. BUTTERFIELD, PH.D., M.D., LOS ANGELES.

The reports of cases of complete outward dislocation of the elbow are not so frequent but that another one may be admissible.

My case, Dr. S., a confrere, a gentleman aged 47, of medium build, was crossing a street diagonally in the middle of the block. As he was within four or five feet of the curb, he was suddenly startled by a "honk" from the horn of an automobile that he had not noticed approaching. He started to spring to the curb, but his foot slipped and he fell forward, striking his left arm on the edge of a mounting block on the curb.

The patient was brought to my office immediately by the automobile that indirectly had been the cause of the accident, and I had a chance to examine the dislocation before swelling set in. I found the radius lying on the ulna in the ordinary relationship, but the pair displaced outward and upward and the forearm partly flexed. The head of the ulna was so far upward or backward that the shaft lay across the outer portion of the radial head of the humerus.

The blow was received at a point two and a half inches below the inner condyle of the humerus as shown by an abrasion of the skin. The ulna received

the full force of the blow at a point just below and somewhat anterior to the insertion of the tendon of the Brachialis anticus. If the blow had been received further down the result would have been a fracture of the ulna and perhaps the radius.

When I took into consideration that the patient fell with his body across the mounting block, striking his chest and the upper part of the abdomen on the top of it after his left arm came in contact with the edge of the end of the block at the patient's left, and noting the direction of the axis of the abraded area, I concluded that the forearm must have been about half way flexed and half way between supination and pronation. If the arm had been fully extended at the instant of striking, the Olecranon process of the ulna would have lain in the Olecranon fossa of the humerus and there would have been less likelihood of a dislocation.

The patient insisted on the reduction being done under anesthesia, so chloroform was administered. With the assistance of only my office nurse who steadied the humerus, I was able to perform the reduction very easily. Standing at the patient's left side as he lay on the table, and on the inner side of his arm, I grasped the wrist with my right hand and produced supination, thus fixing the radius and ulna as one bone. Then making pressure with my left hand against the ulna to carry it slightly away from the humerus, I made traction with my right hand and the misplaced bones came nicely into place as the forearm extended.

The arm and forearm were lightly bandaged to an internal angular splint and the patient taken to his home immediately and put to bed with an ice-bag about the joint.

The probability is that there was a good deal of laceration of the ligaments with the rupture of smaller blood vessels. There was a great deal of ecchymosis with ecchymotic areas extending some distance down the forearm.

On the eighth day I began passive motion, but for several days before the bandages had been removed morning and evening and the arm and forearm massaged. This was kept up for three weeks, at which time the splint was left off. Perhaps the splint might have been discarded a week sooner, but as a matter of precaution, I thought best to keep it on three weeks. The patient called at my office several times during the next two weeks. He seemed to have free and perfect motion of the joint, but there was tenderness in the joint when downward and forward pressure was made with the hand, as for instance on a table top. The patient expressed complete satisfaction and gratefulness and I was well pleased with this, for our brothers in the profession when they become patients are liable to become the severest of critics.

I might add that the only medication needed in the case was one-sixth grain morphine hydrobromide on the evening following the accident, repeated in two hours, and a little laxative used from time to time as seemed needed.

719 S. Alvarado Street.

PERNICIOUS ANEMIA.*

BY CHARLES R. NYBERG, M.D., PHOENIX, ARIZONA.

MORBID ANATOMY.

The most important changes which take place in this disease are those that occur in the skin, muscles, blood

and viscera. The skin becomes a lemon yellow tint which is quite characteristic of this disease. Hemorrhages are common on the skin and serous

*Read before the Maricopa County Medical Society, March, 1912.

surfaces. The muscles, especially of the heart, show marked fatty changes, in fact in no other condition is fatty degeneration so marked. The muscles of the body are intensely red in color, like horse flesh, while the fat is yellow. The heart itself is usually large, flabby, intensely fatty, and of a pale, light-yellow color. The liver may be enlarged and fatty; in most autopsies it is normal. The spleen shows no changes. The lymph glands may show a deep red color.

The iron is in excess, which is a striking contrast to cases of secondary anaemia. It is characteristically deposited around the outer and middle zones of the liver lobule. The changes in the bone marrow and bone are not constant, but it has been said that the bone and marrow may resemble that of a child, i. e., it is red, lymphoid in character, showing great numbers of nucleated red corpuscles.

Cases in which the bone-marrow is inactive and where there is a seeming lack of the bone forming elements are called aplastic. The changes which occur in aplastic anaemia are: 1st, a great reduction in the proportion of the polymorphonuclear leukocytes. 2nd, an increase in the lymphocytes. 3rd, absence of myelocytes. There are few nucleated red cells.

SYMPTOMS.

The patient may have been in previous good health, but in many cases there is a history of gastro-intestinal disturbance, mental shock, or worry. The classical description of pernicious anaemia as given by Addison can hardly be improved upon. "It makes its approach in so slow and insidious a manner that the patient can hardly fix a date or the earliest feeling of that languor which is shortly to become so extreme. The countenance gets pale, the whites of the eyes become pearly, the general frame flabby, rather than wasted. The pulse is large but

remarkably soft and easily compressible, haemic murmurs are constant, visible arterial pulsation in the neck, anorexia, dyspepsia, nausea, vomiting, diarrhoea are persistent. There is an increasing indisposition to exertion, with an uncomfortable feeling of faintness or breathlessness in attempting it; the heart is readily made to palpitate; the whole surface of the body presents a blanched, smooth, and waxy appearance; the lips, gums, and tongue seem bloodless, the flabbiness of the solids increases, the appetite fails, extreme languor and faintness supervene; some slight oedema is probably perceived about the ankles; the debility becomes extreme; nevertheless, to the very last, and after a sickness of several months' duration, the bulkiness of the general frame and the amount of obesity often present a most striking contrast to the failure and exhaustion observable in every other respect."

BLOOD CHANGES.

There is a decrease in the number of red blood corpuscles (oligocythemia). They average between two and one million to as low as 150,000 per cubic millimeter. Hemoglobin is relatively increased, a condition which is exactly opposite to chlorosis and secondary anaemias. Poikilocytosis is the rule. The leukocytes are usually unchanged, but in grave cases the changes which occur are similar to those of aplastic anaemia. The color index is 1.7. The amount of hemoglobin is increased per corpuscle. The blood platelets are diminished.

LEUKOPENIA.

A leukopenia is an actual decrease in the number of white cells and occurs in measles, mumps, malaria typhoid, tuberculosis and influenza.

DIAGNOSIS OF PERNICIOUS ANAEMIA.

The disease is not often recognized by the general practitioner. The lemon-yellow tint of the skin leads to

the diagnosis of jaundice; the pigmentation suggests Addison's disease; the anaemia, puffy face, swollen ankles, and albumin in the urine, Bright's disease; the shortness of breath and palpitation heart-disease; the pallor

and gastric symptoms, cancer of the stomach. The retention of fat, the insidious onset, the absence of signs of local disease, and the blood features already discussed are the most important diagnostic points.

THE PHYSIOLOGY OF THE DINNER TABLE.

BY R. S. LEVENSON, M.D.

When customs become so universal as have those of the civilized world in regard to the composition of the daily meal and the order of the various courses comprising it, they no longer excite our curiosity. Were one asked for the reason of our practices in the composition of the ordinary dinner he would probably state that custom has established the routine and would not for a moment think that there is good physiological reason for it. There nevertheless is. The discoveries in the physiology of digestion during the past dozen years have shown that there is scientific basis for our habits in the taking of food and that we have unconsciously established a routine of courses in the dinner that takes thorough cognizance of the physiological principles upon which digestion is founded.

In more elaborate affairs than the ordinary dinner there is seen to be on analysis a purposiveness in our practices that may on casual observation seem to be entirely without physiological significance. Take, for instance, the elaborate gowns worn by the women and the evening suits by the men, the floral decorations and the music. There is no doubt that each of these serves the function of composing a generally favorable stage-setting as it were for digestion. It has been abundantly shown in recent years that a person's mood is of the greatest significance in the performance of the

digestive functions. If one is in a happy frame of mind free from cares and worries of his professional or commercial surroundings, digestion proceeds as it normally should; on the other hand, worry, anger, and anxiety are potent factors in destroying the normal progress of the digestive functions. There can be little doubt that such practices as we have mentioned tend to dispel any of these unfavorable moods that may be the relics of the care-laden day, and produce a frame of mind conducive to the normal progress of digestion.

Coming now to a consideration of the composition of the meal itself, think how frequently the first course consists of some article of food which appeals forcibly to our sense of smell, as caviar, sardellen, anchovies, or smoked salmon. This practise is of course in accord with the principles of digestion first thoroughly investigated by Pawlow, who showed in his wonderful series of experiments that the most potent factors in the production of a favorable flow of gastric juice are stimuli which appeal to the various special senses, chiefly smell and taste. Moreover, the taste of these articles as well as others commonly employed as one of the introductory courses of a meal, such as oyster, lobster, clam, or crab cocktails, salads, and the various relishes, is such as to appeal forcibly to the sense of taste and thus produce an abundant flow of "psychi-

cal" gastric juice. The importance of the psychical influence of these articles of food will, I think, be at once appreciated by most individuals if they but think for a moment of such articles and note the ready flow of saliva which ensues. Though without any noteworthy amount of nutritive value, such foods are of great importance in digestion on account of their influence in inaugurating the flow of gastric juice.

The second course in the usual dinner menu is soup and here we again find substantial physiological reasons for its being placed where it is. Here also we are indebted to Pawlow for the discovery of the fact that the only other stimulus to the flow of gastric juice beside the various appeals to the special senses, is a chemical one and the most potent factors inducing this flow of chemical gastric juice are the meat extractives, which of course are the principle components of broths and soups. We thus see that there is a definite physiological reason for the introduction of broths and soups into the early stages of the meal.

The entree which usually follows the soup apparently serves the rather negative purpose of merely consuming time for the acid gastric juice to be secreted in sufficient quantities to be in readiness for reception of the next, and, from the gastric standpoint, the most important course of the meal, the meat course; so far as gastric digestion is concerned proteids, as represented by meat, are the most important articles of the meal and it is the digestion of these for which we may consider the previous gastric activity to have been in preparation.

Dessert is usually composed of entirely different food stuffs than are the earlier courses. Carbohydrate preparations or frozen foods composed chiefly of milk or cream, water, fruit flavors and sugar, compose the desserts

usually found on the modern menu. Here again physiological research gives us an excellent reason for the placing of these articles at the end of the meal. Until within recent years the general medical as well as lay view of the stomach was a large hollow organ which by a vigorous churning movement mixed together all of the food stuff introduced into it and when this was sufficiently churned and mixed expelled it into the duodenum. Today we know that this is quite incorrect. Instead of there being a general admixture of all the matter taken into the stomach there is a layer like arrangement in which the material first introduced takes a peripheral position next to the gastric mucosa, that subsequently introduced taking a more and more central position. Only the material which lies next to the gastric mucous membrane is acted upon by the gastric juice; when the latter agent has sufficiently acidified and pepnotized this, the slow wavy peristalsis of the fundus moves this peripheral portion into the pyloric antrum and thus the next layer comes into contact with the mucosa.

According to this process the food last taken into the stomach is thus placed most centrally and is in this way protected from the action of the acid gastric juice for as long as several hours. It is this fact which gives us the reason for the carbohydrate food stuffs being placed at the end of the meal. It is well known that the gastric secretions contain no ferments which act upon starch. Such a ferment however, is contained in considerable quantities in the saliva, the so-called amylase. In the process of mastication and insalivation of the food the amylase comes into intimate contact with the food particles and, given favorable surroundings, is able to effect a considerable degree of starch digestion, for quite some time after the food

leaves the mouth. This favorable surrounding the carbohydrate dessert finds in the central position that it takes in the stomach contents, where it is well protected from the action of the acid gastric juice which as is well known would immediately destroy the activity of amylase which is able to act only in an alkaline medium.

We thus see that there is sound physiological reason for the arrangement of the meal as it is ordinarily composed in civilized countries and that almost each course and each article serves some function in harmony with the laws of digestion. It may be said that the digestive functions have accommodated themselves to our mode of taking food rather than the reverse. This may be true. Regardless, however, of how these functions became instituted, we do know that the processes of digestion in the stomach

of normal individuals of the civilized races of today are adapted to conform to the meal as outlined above and that departures from the usual routine will probably be attended by disturbances of function. We have all seen the individual who at the buffet meal has chosen to eat his pie before his meat, wisely consoling his astonished associates with some such bromide as "What is the difference? It all gets mixed up together when it gets into the stomach." Such a one should know that the routine of the meal is established on a sounder basis than the fancy of the chef, and that he will probably have to make payment in terms of disordered gastric function for repeated departures from established custom.

745 Title Insurance Building, Los Angeles.

LUPUS ERYTHEMATOSUS.

BY DR. H. E. STROUD, LOS ANGELES, CALIFORNIA.

The history of the case of Lupus Erythematosus is as follows:

The lady is the wife of a physician. Eight years ago she had a niece in her home who had pulmonary tuberculosis; also tubercular glands of the neck. The latter were poorly operated on by curetting instead of enucleation. The lady dressed these ulcerations and rendered her many acts of kindness, as massaging the face, combing the hair, etc. One year later a spot of lupus erythematosus developed on the right cheek; for two years the development was very slow, when, apparently due to an irritating application, the spreading was rapid and most virulent. For five years the lady has been constantly under the care of the leading dermatologists in San Francisco. Every regular and usual method of treatment was faithfully carried out,



including severe curettings; mild, medium and strong applications alike failed, and Dr. Reginberger advised



that she find someone who had an ice crayon apparatus and try the effect of freezing.

This lady consulted me in December, 1910; I must say I have never seen a more frightful condition; in addition to the lesions shown in the photo there were scores of small lesions, all over the face, especially inside the ears.

Due perhaps to local treatment some of the old lesions looked ready to crack and ulcerate. The lady was too mentally distressed to bear questioning so I immediately froze as large a surface as I dared, and so accurately was the application made but few points required a second freezing.

There seemed to be no special haste in the case, and complete healing was secured before repeating the treatment. One lesion was on the upper eye-lid. The eye was cocanized and the lid raised with an elevator, and the eyeball constantly irrigated with hot normal salt solution. No complications occurred and the healing is smoother than by any other mode of treatment.

The results of this fearful case are such as to prove the value of this method. Two cases of epithelioma on the temple show no sign of returning after eight and thirteen months.

Lankershim Building.

SALVARSAN.

In the Medical Synposium on recent studies of Syphilis occurs the following paragraph by A. B. Wolbarst, M. D., of New York, consulting Genito-urinary Surgeon, Central Islip State Hospital; Professor of Genito-urinary Diseases, New York School of Clinical Medicine:

"It must be apparent to all by this time, that the genius of Paul Ehrlich has given to the therapeutics of syphilis the most potent remedy that has ever been known. Many thousands of cases have already been treated with this new remedy, in the hands of numerous clinicians, and with exceedingly few exceptions, all are agreed that this new preparation constitutes a most valuable

addition to our armamentarium in the management and control of syphilis. This preparation is intended to reach the parasites in the body which cause the disease, i. e., the spirochaetae, and destroy them in one dose, in accord with Ehrlich's chemo-therapy. For many years, he aimed to find a substance that was not only destructive to the parasites (parasitotropic), but at the same time, not injurious to the body of the host (organotropic). Ehrlich believes that the new arsenobenzol preparation, or as it has been named, Salvarsan, is not organotropic, but parasitotropic, and hence the ideal remedy for a cure of the disease by the method of "therapia sterilisans magna." Indeed, clinical evi-

dence is accumulating every day, in all quarters of the globe, that this belief of Ehrlich has been substantiated by actual test."

Happopeau, of Paris, states that Wechselman administered "606" to five children, three of whom died. He also states that though used only a short time, there are 10% recurrences in all cases where it is used. Some recent reports place the recurrences at upward of 50%.

Spiethoff reports the death of an adult within twelve hours after the injection. No signs of arsenical poisoning were found at the post-mortem.

In Bonn a case was reported in which death occurred suddenly the night after injection. The patient was an adult female.

Previous to Jan. 25th, 1911, fourteen deaths in infants and seventeen in adults were reported.

On Nov. 21st, 1911, Dr. Gaucher, clinical professor of cutaneous and syphilitic diseases at the Faculté de Médecine de Paris, reported before the Académie de Médecine two new cases of death from salvarsan. Gaucher insists that relapses occur not in isolated cases, but regularly following the treatment of syphilis by salvarsan.

In the New York Medical Journal of July 15th, 1911, Marshall of London in a criticism of salvarsan concludes by saying "even if the administration of salvarsan was free from danger and inconveniences, there appears to be few indications for its employment in the treatment of syphilis, but the dangers and inconveniences seem to outweigh any possible benefits to be derived from it."

That there is a reluctance to report deaths immediately attributable to salvarsan there can be no question. The author of this article knows of several cases which have not been reported. One case which was written up very carefully and in which death occurred within five hours after the administration of 6-10 gram of salvarsan, and accompanied by

post-mortem findings by one of the most competent men in America, was sent to one of the most influential journals in this country, and accepted for publication. After holding the article for more than six months, a correspondence elicited the statement that the matter had been overlooked. It is significant that a search through the issues of the journal referred to, fails to show a single reported death from salvarsan. One of the leading physicians of Los Angeles informs me that he knows of three deaths in this city caused by salvarsan.

Thus it will be seen that the statement of Wolbarst, which opened this article, should be accepted with qualifications and limitations. One is reminded of the time when chloral hydrate was placed upon the market and administered in doses of one or two drams. It was a hypnotic which never or seldom failed to produce sleep. The dose of chloral hydrate after a period of time was reduced to a safe dose, and justly retained its place as a hypnotic; one of the best today.

About the usefulness of salvarsan there can apparently be no question; about the *safety* of it in full doses there is certainly a grave question. Until we can be assured what the *safe* dose is, should we not be careful in the administration of so-powerful a remedy?

The nature of the disease for which it is administered forms some protection against legal recourse becoming a matter of frequent occurrence, and yet the moral responsibility is none the less.

G. L. C.

INFECTION.

A baby smiled in its mother's face;
The mother caught it, and gave it
then
To the baby's father—serious case—
Who carried it out to the other men;
And every one of them straight away,
Scattering sunshine thro' the day.



Perspective of the Los Angeles Medical Association Building to be Erected at the Southeast Corner of Sixth and Olive Streets as a Permanent Home and Office Building.

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A MEDICAL, CLIMATOLOGICAL AND SOCIOLOGICAL MONTHLY MAGAZINE.

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EDITORIAL

THE FINEST MEDICAL BUILDING IN THE WORLD FOR LOS ANGELES.

The most casual observer cannot help noting the marvelous progress being made in Southern California along all lines of material activity, religiously, commercially, educationally and otherwise; needless to mention the stupendous projects that are now in course of completion, the aqueduct, harbor, etc., building in and out of the city as notable evidence.

One of the oldest and most conservative organizations in the city, the Los Angeles County Medical Association, has plans on foot, and fully matured, for the erection of a magnificent building at the corner of Sixth and Olive Streets, that will stand as a monument to the faith they have in Southern California—and as an evidence of the soundness of the proposition, they already have applications for offices far exceeding the number that they contemplate erecting.

The location of this splendid building (twelve stories high) is ideal, facing as it will, beautiful Central Square—on the opposite side of which now stands Temple Auditorium and the Auditorium Hotel. The erection of this building will add prestige to the Society that will be far reaching, advertising, as it will, to those seeking medical aid, the superb facilities possessed by the Society, as the building will be known and pointed out as The Medical Building, etc. The Society is certainly to be congratulated for keeping pace with the Spirit of Southern California—the land of Hope—of Sunshine—of Promise and Opportunity.

It certainly is worthy of the financial support of every Medical man in Southern California.

BANQUET IN HONOR OF DR. ELLIS.

Sometime since the following letter was sent to Dr. Ellis:

Los Angeles, Calif.

April 15, 1912.

Dr. H. Bert Ellis,

Bradbury Bldg., City.

Dear Dr. Ellis:

The undersigned, your colleagues in Los Angeles County, as a slight token of our appreciation of your able and singularly successful management of the entertainment of the American Medical Association, at their meeting in Los Angeles during the month of June, 1911, ask you to accept a testimonial dinner from the profession to be held at the University Club at 7:30 o'clock, p. m., Monday evening, April 22nd, 1912.

Hoping that you will give us this opportunity of having you for our guest, we are

Very truly yours,

W. W. Beckett	Titian J. Coffey
F. T. Bicknell	Chas. C. Browning
Stanley P. Black	Raymond G.
H. G. Brainerd	Taylor
Norman Bridge	D. A. Thieme
G. A. Broughton	R. W. Miller
Chas. W. Bryson	A. P. Wilson
F. D. Bullard	W. F. Johnson
Michael Creamer	J. H. McBride
C. W. Decker	Walter Lindley
F. S. Dillingham	A. S. Lobinger
W. D. Dillworth	G. E. Malsbary
Wm. Duffield	M. L. Moore
J. M. Dunsmoor	Fitch C. E.
Wm. A. Edwards	Mattison
E. W. Fleming	Frank W. Miller
J. R. French	Granville Mac-
Donald J. Frick	Gowan
Hill Hastings	Chas. B. Nichols
J. L. Hagadorn	F. M. Pottenger
A. L. Kelsey	L. M. Powers
J. L. Lamb	Albert Soiland
Wm. Monroe	C. P. Thomas
Lewis	J. W. Trueworthy
Arthur A. Libby	R. Wernick
Nannie C. Duns-	C. H. Whitman
moor	Ralph Williams
H. B. Fasig	Chas. E. Zerfing
H. G. McNeill	John R. Haynes
M. M. Armstrong	Cecil E. Reynolds
H. G. Rosenberger	Elizabeth
E. A. Bryant	Follansbee
J. A. McGarry	Hugo Kiefer
C. P. Bagge	A. J. Scott
C. Holmes Criley	E. J. Cook
W. H. Dudley	Paul Bresee
H. W. Levengood	J. H. Utley
Thomas J. McCoy	J. K. Carson
P. V. K. Johnson	H. P. Wilson
Harvey Smith	C. W. Anderson

E. W. Hanlon
Joseph Kurtz
Lyman Brumbaugh
Stookey
J. H. Seymour
P. C. H. Pahl
J. T. Fisher
Dudley Fulton
H. E. Southworth
W. L. Zuill
Harry O. White
John C. Ferbert
W. W. Richardson
Eugene Miller

F. W. Steddam
E. M. Lazard
Chas. L. Bennett
W. T. McArthur
A. P. Wilson
Sylvester Gwaltney
W. S. Johnson
W. H. Kiger
J. Ross Moore
S. D. Brooks
U. G. Miller
T. W. Bishop
Jos. M. King

The invitation was accepted by Dr. Ellis. The Committee of Arrangements consisted of Dr. O. O. Witherby, Chairman; Dr. F. C. E. Mattison, and Dr. C. W. Decker. It is but fair to say, as a matter of acknowledgment, that the burden of the work was done by Dr. Decker.

On Monday evening, April 22nd, Dr. Ellis was banquetted by his friends, who had gathered to the number of one hundred and ten.

Dr. Ellis blushed when nearly suffocated by the shower of encomiums. He seemed to try to make everybody else believe that everybody else was responsible for the successful entertainment of the American Medical Association, but everybody seemed to know the effective work done by Dr. Ellis at that time. And the report that there was a surplus of some nine thousand dollars, only added to our respect for the master mind that had planned the entertainment of the national association. The contributions to the fund for the entertainment of the American Medical Association had been made in such a way that any surplus was to go toward the purchase

While writing this article, a recent copy of the Southern California Practitioner—a young "Practitioner," as it were—seeing the name of Dr. Ellis, exclaimed: "Father." Upon consulting the records, we find it literally true that for more than a decade, Dr. Ellis exercised paternal care over this publication.

of a permanent home for the Los Angeles County Medical Association. A picture of the proposed building was presented. A site for the structure has been secured at the southeast corner of Sixth and Olive Streets.

We would that there were more often occasions for such banquets. The social gathering together of professional men breeds harmony, and is advantageous in many ways.

ADDITIONS TO OUR EDITORIAL STAFF.

Following our scheme to broaden the scope of the Southern California Practitioner, we have added to our editorial staff four men of noted prominence in the profession. Dr. Kaspar Pischel is of national and international renown as an ophthalmologist; Dr. H. D'Arcy Power is of similar repute in the field of internal medicine; and Dr. Andrew Wade Morton, the chief surgeon of the Santa Fe, is one of the foremost American surgeons. The address of all these gentlemen is Butler Building, 135 Stockton Street, San Francisco. The fourth name is that of Dr. William W. Roblee, of Riverside, who needs no introduction to our readers.

The Medical Society of the State of California held what was generally conceded to be a successful meeting at Del Monte, April 16, 17 and 18, being the forty-second annual session. This Society is doing much good, especially in the unification of the profession of the state. It is unfortunate that there

were not more in attendance. Those who did not attend, missed many good things. Too bad they could not hear Mr. Morrow's address; possibly it would have stirred them to greater effort, as we hope it did all those who were so fortunate as to hear it. He showed that we are already in politics, regardless of our wishes in the matter; our opponents have placed us there, and will practically bury us alive, if we don't wake up. It is our duty to defend what we regard as the sacred trusts of our profession.

If we were to enter into the spirit of criticism, we would call attention to the fact that there seems to be need of the division of the society into sections at these annual meetings, that both the internists and surgeons, as well as the nose and throat men, may be kept busy all the time. As it is, when medical papers are being read, the surgeons may be seen enjoying the fresh air, which is hygienic but not specially conducive to the development of the scientific aspect of the session. Likewise, the medical men seem prone to wander away during the reading and discussion of papers bearing upon surgical subjects. Surely no better criticism could be offered, than that this Society has grown until the division into sections is desirable.

THE LAWS OF COLLES AND PROFETA.

Much has been written lately about these laws, in which it seems to be taken for granted that they have been definitely discarded by the recent serological work. This is largely because

the Wasserman test has been found in apparently healthy mothers of syphilitic children, and in apparently healthy children of syphilitic mothers. This only means that the antibodies, upon which the test depends, have passed the placental barrier between mother and child. In fact, the passage of these antibodies through the placental circulation may account for the possibility of these laws existing. The clinical fact that the apparently healthy mothers and children, comprehend under the laws of Colles and Profeta, often remain free from demonstrable syphilitic lesions throughout life, would speak for the validity of these laws.

CONTINUOUS VERSUS INTERRUPTED HOSPITAL SERVICE.

This subject is ably discussed by Fitz in an address recently published in the Boston Medical and Surgical Journal. Fitz holds that the question of the introduction into hospitals of a continuous or an interrupted service depends first, upon the source from which the hospital derives its funds, that is, from endowment or taxes. Although all hospitals are for the immediate benefit of the sick, in a civic hospital opportunities for teaching and research must be subordinate. They are called for and justified on the ground that through them a better grade of physician and surgeon can be secured for the hospital and can be developed in it. Taxpayers are justified in the demand that it is more important for them to have many well-

trained practitioners at their call than fewer but more highly trained physicians and surgeons. The chief purpose of the hospital supported by taxation is the care of the sick, and especially of the sick poor. The next obligation is the welfare of the taxpayer, who is responsible for its support. Hospitals may be regarded as having a threefold purpose: First, the care of the sick; then the study of diseases, and finally, the teaching of medicine. In an institution as large as the Boston City Hospital, more physicians and surgeons are needed in the interest of the patients than can well be utilized in medical teaching.

The article contains much food for thought.

DR. MUSSER'S BRAIN.

Dr. Musser's brain, which was examined by Dr. Milton J. Greeman, curator of the Wistar Institute of Anatomy and Biology, was found to be below normal in weight. Some ascribed this fact to the development of the mind along only one line. But it only emphasizes the well-known biologic fact that weight and size, whether of body or brain, do not necessarily correspond with physical and mental ability and endurance. This is true because much that contributes to the weight of both the body and brain, notably adipose and connective tissue, adds little or nothing to the physiological activity of these parts.

WORTHY THE MAN.

It is reported that Sir Frederick Treves has resigned various official positions. He had retired from active

practice some time ago. Emerson long ago declared that at sixty a man must begin to take in sail. The noted London surgeon recently celebrated his fifty-ninth birthday, and declares that he is giving up his work because he has tired of it after twenty-six years of practice. We are impressed that an excellent man has set an excellent example. Too often a useful life, marked by high attainments, is marred during the declining years by inferior work or opposition to the advance of science.

CONTWISTICATED MENTALITY.

In an address recently delivered by a "Dr." B. F. Austin on "Can Legerdemain Explain all Psychic Phenom-

ena?" that gentleman took occasion to declare that physicians were not qualified to act as judges in court trials of persons supposed to be mentally afflicted. "Because a man sees and hears things that other people cannot see or hear, he is often declared insane and sent to the insane asylum; where he usually becomes really unbalanced. That man in reality is in incipient mediumship, a state which makes him appear like crazy to undeveloped persons." From which we conclude that the fully developed mediumship is marked by a condition that physicians would consider super-crazy or hyper-insane.

EDITORIAL NOTES

PANAMA TO BE PROPERLY INSPECTED.

We regard it as important that the work being done on the Isthmus, shall be properly inspected before the water is turned in. To this end, we are glad to announce that one of the editorial staff of the Southern California Practitioner, Dr. Walter Lindley, ably assisted by Dr. H. G. Brainerd, Dr. George L. Cole, Dr. West Hughes, and Dr. E. M. Pallette, all of Los Angeles, have joined the excursion to Panama, under the auspices of the San Francisco Chamber of Commerce. The party left the Los Angeles Harbor, 11:00 a. m., April 26th, due to return to Los Angeles May 21, 1912. In the next issue, we will have an authentic account of the work and conditions at Panama.*

*Incidentally, Dr. Lindley is the representative of the Los Angeles Chamber of Commerce.

DR. KRESS ABROAD

Dr. George H. Kress has gone East, where he will remain until immediately after the A. M. A. meeting at Atlantic City on June 4-8th, when he will leave for Europe. Dr. Kress was elected to be one of the three California delegates to the A. M. A. meeting at the recent Del Monte session of the State Medical Society. Dr. Kress will spend his time in the East and abroad on eye, ear, nose and throat work, to which specialties he will limit his work on his return home.

RESTHAVEN HOME.

The Board of Supervisors of Los Angeles County has voted \$125.00 monthly to the Psychopathic Parole Society, to aid in maintaining a Resthaven Home for neurasthenic women. The movement has been inaugurated and carried on by the club women of Los Angeles, who will raise the balance of the money

necessary to make the project a success, chiefly through membership dues of two dollars per year. Mrs. Slater is the chairman of the membership committee. This purports to be the first Resthaven Home in this country conducted by women for women. Judge Hutton, before the Evening City Club, urged a similar work among men, and Dr. Dana Bartlett was made chairman of a committee to outline plans for developing such aid.

AMERICAN MEDICAL EDITORS' ASSOCIATION.

The annual meeting of the Society will be held at Atlantic City, New Jersey, on June 1st and 3rd with headquarters at the Marlborough-Blenheim Hotel. Dr. Thomas L. Stedman, Editor of the Medical Record, will preside, and an attractive programme is being prepared. The annual banquet will be held on the evening of June 3rd. Every editor and those associated in medical journalistic work will find this meeting worth attending.

QUACKERY.

"A National Department of Health and the National League for Medical Freedom, or Organized Medicine versus Organized Quackery." Under this caption Dr. William J. Robinson of New York City discourses in the leading article in the Medical Fortnightly of April 25, 1912. We would like to reproduce the entire article, if space permitted. In concluding his summary of the matter, Dr. Robinson declares that "The fight is not between a mythical medical trust and medical libertarians, between medical tyranny and medical freedom; the fight is between progressive, scientific medicine on the one hand and organized quackery on the other. The National League of Medical Freedom is misusing the last word of its title; it should change the word freedom to the word quack-

ery—and then the world will know just what it stands for." It seems to be a case of misbranding.

SELLING THE EVERGLADES, ETC.

There are some excellent Business Talks to Doctors in the Medical World. In the April issue, special attention is paid to fake tropical propositions, especially the International Lumber and Development Company, and the Florida Everglades. The first is a Mexican plantation scheme and the latter is a scheme to sell water for land. The moral is supposed to be: Invest at home. That is all right if your home is in Los Angeles. It is remarkable that such nefarious schemes should flourish while there are such excellent opportunities for legitimate investment in this region.

SKIN STERILIZATION IN SURGERY.

In an article upon this subject, by Dr. Winslow Anderson, in The Pacific Medical Journal, there is an excellent review of the literature and summing up of the methods in common use. The Doctor concludes the article by declaring that perfect results may be secured by the use of freshly prepared thymolized tincture of iodine, composed of thymol 1 part, iodine (scales) 3 parts, and absolute alcohol 97 parts. This may be used for both wound and skin disinfection.

ORGANIZED FOR SUICIDE AND MURDER.

Articles of incorporation were filed at Sacramento March 28th, in the office of the Secretary of State, by the so-called California Anti-Compulsory Vaccination League of Berkeley. The avowed purpose of the corporation is stated to be to fight vaccination, to oppose it in every way, and to work for its abolition. It is proposed to organize branches throughout the State.

SWAT THAT FLY.

Bisbee, Arizona, has joined in the fight against the germ-carrying house fly. The matter was brought up before the Commercial Club by Dr. Miner, the County Physician, and a committee on health was appointed to inaugurate a campaign of health education. The buzzing disease disseminator would seem unsafe in Bisbee. Dr. Hunt is the chairman of the committee.

RATHER STRIKING.

"The man had an abscess in the lung and Dr. Summers stabbed him in the back with a knife and took out about a quart of pus and he recovered, to my great surprise and relief."—Dr. Gifford, page 169 of the April number of the Western Medical Review.

HEALTH DEPARTMENT FOR PALESTINE.

Nathan Straus, the New York philanthropist, is reported to have founded a health department for Palestine. The aid of United States physicians will be invoked to stamp out malaria in that region, to make safer the pilgrimages to Palestine and Jerusalem. Mr. Straus was a delegate appointed by President Taft to attend the Seventh International Congress against Tuberculosis, which met last month in Rome.

VERDICT FOR PHYSICIAN.

After a single ballot, remaining out but ten minutes, a San Diego jury brought in a verdict for the defendant, Dr. R. G. Hulbert, who had been sued for malpractice to the extent of \$20,000 damages by Albert L. Morgan. It is interesting to note that the attorney for the prosecution in this case occupied some twenty minutes in argument before the jury, whereas the attorney for the defendant physician submitted his case without argument.

Dr. Truman W. Brophy, of Chicago, is at the Hotel Alexandria.

Dr. N. D. Brayton has resumed practice at Gila Crossing, Arizona.

Dr. Melvin Ellis of Los Angeles, has changed his office to 423 Auditorium Building.

Dr. Walter D. Boggs has his office and residence at 245 Oakland Ave., Pasadena.

Dr. R. F. Coyle, wife and daughter, spent a few days at the Westminster, Los Angeles.

Dr. W. H. Bucher, of Kingman, Arizona, registered at the Alexandria, Los Angeles.

Dr. Cyrial Cron has returned from Cananea, Mexico, and opened offices in Phoenix, Arizona.

Dr. J. C. Ballard, surgeon U. S. Army, has been visiting Dr. Baird, Williams Street, Pomona.

Dr. Arthur Stanley Granger of Los Angeles, has returned and located in Suite 423 Auditorium Building.

The Alhambra Hospital, under the management of Miss Mary E. Bishop, is now open to the public.

Dr. and Mrs. Lloyd Bailey have returned to Los Angeles after spending twelve years at Mazatlan, Mexico.

Dr. D. H. Calder, Superintendent of the Utah Insane Asylum, at Provo, is spending a vacation in Los Angeles.

Wonder if Senator Works and those of his ilk would be willing to admit what the "Doctors' trust" really is?

Dr. Pliny F. Haskell, recently of Chicago, has purchased a half interest in the practice of Dr. Otis of Artesia, Cal.

Dr. Charles R. Nyberg has opened offices in Phoenix, Arizona, in the suite with Dr. L. D. Dameron on Washington street.

Dr. and Mrs. Ernest S. Baker, of Lafayette, Indiana, are at the Angelus from the Orient, concluding a tour of the world.

Dr. William J. Jackson, of San Francisco, has been visiting Mr. and Mrs. R. W. Teague and D. C. Teague, at San Dimas.

The Pomona Valley Medical Society was entertained at Ye Claremont Inn, April 25th, by Dr. L. M. Breed and Dr. E. Huntington.

San Diego now claims a population of 65,000, based on figures furnished by the water department. Don't they drink anything but water in San Diego?

Dr. Ethel Leonard of Los Angeles, has her office and laboratory at 712 California Building, corner of Second and Broadway.

Dr. Francke, of Munich, declares the sheath skirt is making the women knock-kneed. Is it making or revealing this condition?

Dr. A. C. Kingsley of Nogales has been appointed Medical Superintendent of the State Hospital for the insane at Phoenix.

Dr. G. W. Forester, 278 North Garey Avenue, Pomona, was visited by an early morning fire, last month. Loss covered by insurance.

Dr. Harry M. Wegeforth has been elected president of the Board of Health of San Diego, to succeed Dr. Loos, whose term had expired.

Dr. G. W. Forester, of Pomona, whose office at 276 N. Garey Avenue was ruined by fire, has removed to rooms 11 and 12 in the Union Block.

It would seem that Senator Works has a sort of general grouch against everything proposed for the betterment of the health of the people.

The Forty-sixth semi-annual meeting of the Southern California Medical

Society was held in the Hotel Maryland, Pasadena, May 2nd and 3rd.

The graduating exercises of the Pasadena Hospital School for Nurses was held May ninth, at the Shakespeare Club House in South Los Robles Avenue.

The charity ball given for the benefit of the Barlow Sanatorium, was a success both socially and financially. Altogether \$46,861.60 was secured for this enterprise.

The regular monthly meeting of the Cochise County Medical Association was held at the Hotel Gadsden, Douglas, Arizona, April 13th. There was a good attendance.

Col. Louis W. Crampton, formerly chief surgeon of the U. S. Army in the Philippines, passed away April 12th, at the Hotel Stewart, San Bernardino. Cause, pneumonia.

Dr. H. P. Deady, of El Paso, has gone to Velardena, Durando, to become chief surgeon and medical director of the American Smelting and Refining Company at that place.

The annual meeting of the Southern California Health Association and the Los Angeles County Health Officers' Association was held May 1st, at the Hotel Maryland, Pasadena.

"A Doctor helped make China what she is today; let China help the doctors that they may be of greater help to China."—Editorial in Medical Review of Reviews for April.

Dr. Andrew Stewart Lobingier has purchased land for a residence in Windsor Square, Los Angeles. The contemplated structure is to be on the order of a French chateau.

Los Angeles is gaining an unenviable reputation through our unworthy Senator's opposition to the greatest medical and sanitary measure of the age in the United States—the Owen Bill.

Bakersfield is to have a new hospital. The Sisters of Mercy announce that they will erect a new \$75,000 hospital on Truxton Avenue. The building will be fireproof and strictly up-to-date.

Dr. Oscar Anderson, of Ocean Park, has removed his office to 205 Ocean Front, between Rose and Ozone. Here he is associated with Dr. W. M. Kendall, formerly of 207½ Speedway.

Dr. Eleanor Seymour, after eight months service, resigned as bacteriologist in the State Hygiene Laboratory at Berkeley, to return as resident physician to the Pacific Hospital, Los Angeles.

Dr. Joseph M. Matthews, of Louisville, Ky., former president of the American Medical Association, was taken ill in Los Angeles and obliged to cancel a number of lecture engagements.

The Overland Club, Pasadena, gave a smoker in honor of the visiting physicians attending the Southern California Medical Society meeting, May 1st. There was a good program of entertainment.

Dr. E. R. McPheeters of Globe, Arizona, has been appointed chief surgeon for the Shannon Copper Company at Clifton, where the doctor will be in charge of two hospitals belonging to the Company.

The Pomona Hospital Company was incorporated April 25th, for \$100,000, by Dr. J. K. Swindt, Dr. E. E. Kelly, W. A. Vandegrift, F. E. Graham and C. P. Curran. The hospital is to cost about \$30,000.

Dr. E. E. Patten, of Van Nuys, has been appointed local surgeon for the Van Nuys division of the Pacific Electric Railway. The doctor is also surgeon for the Chatsworth branch of the Southern Pacific Railroad.

The American Proctologic Society will hold its fourteenth annual meet-

ing at Atlantic City, N. J., June 3 and 4, 1912. The headquarters and place of meeting will be at the Hotel Chalfonte, North Carolina Ave. and Boardwalk.

Dr. Shine, head of the medical department of the Phelps-Dodge Company of Bisbee, Arizona, and surgeon for the El Paso and Southwestern Railway, has purchased a large tract at Pacific Beach, San Diego. A beach resort is contemplated.

The annual meeting of the Arizona Medical Association was held May 7th and 8th, one session being in Bisbee and the other in Douglas. Enough automobiles were placed at the disposal of the visitors to take the doctors from Bisbee to Douglas.

Lieutenant F. F. Jewett, of Douglas, Arizona, is recruiting thirty men to be apportioned among the medical officers of the regiment, and will make application to the adjutant general for a completely equipped medical corps for the national guard.

Dr. John Tiedeman is reported to have died of hook-worm disease in Seattle. The disease was apparently contracted in San Francisco in 1909, while doing laboratory work there. The diagnosis was made a few days before death, by the patient and Dr. Benjamin S. Parshall.

Dr. W. I. Simpson of Phoenix, councillor for the Middle District in the Arizona Medical Association, organized the Yuma County Medical Society at Yuma, Arizona, in March. Dr. R. R. Knotts was elected President and Dr. O. I. Tower Secretary-Treasurer of the new Society.

The Louisiana State Board of Medical Examiners announces that with October, 1912, practical examinations will supplement the written examinations. This is a step in the right direction, but practical examinations are

difficult to conduct in a satisfactory manner. Otherwise they would be the more ideal.

The residents of the San Pedro harbor district have petitioned the City Council for an emergency hospital, which would seem to be especially called for by the large and increasing number of industrial plants and shipping activities there. Dr. C. E. Zerfling, Police Surgeon, has been commissioned to investigate and report.

The Board of Directors of the Hospital of the Good Samaritan announce that Mrs. Horatio Walker, Jr., a graduate of the Toronto General Hospital and Training School for Nurses, recently Superintendent of the Children's Hospital, Columbus, Ohio, has been secured to take charge of the Hospital, beginning March 17th, 1912.

The American Red Cross First Aid Car No. 1 is being sent over the country, giving demonstrations in emergency treatment, under the supervision of Dr. M. W. Glasgow. The car left Chicago March 4th, arrived in Los Angeles April 29th, San Diego, May 2nd, thence went to San Francisco, to return east over the Northern Pacific.

The Physicians' Club organized at San Bernardino March 23, 1912. The new organization is to be devoted entirely to scientific research, and is to be independent of the San Bernardino County Medical Society. Dr. G. R. Owen is President; Dr. D. C. Strong, Vice-President; Dr. Thomas McHugh, Secretary; and Dr. R. S. Gibbs, Treasurer. Meetings will be bi-monthly.

Dr. S. D. Brooks, head of the local Bureau of Public Health and Marine Hospital Service, has sent to the chief of that department, Dr. Rupert Blue, at Washington, a report recommending the erection of a quarantine station at the Los Angeles harbor suffi-

cient to accommodate 1000 persons. The arrangement of ample accommodations at the harbor must not be unduly delayed.

The importance of co-operation between the physician and dentist is emphasized by two original articles appearing in the March issue of the Monthly Cyclopedia and Medical Bulletin, one on Dental Disease as it affects the mind, by Upson of Cleveland, and the other on Imperfections in the Diagnosis and Treatment of Pathological Conditions of the Teeth and Jaws, by Ivy of Philadelphia.

It is reported that Mrs. Cora B. Parkhurst, a wealthy widow of Ocean Park, died of "heart disease" in the office of the "Normal Life Co." while receiving treatment, after a fast of 56 days. This Company is an organization that advertises to restore health and reduce flesh. In this instance, it seems to have reduced the flesh to the grave. At any rate, the coroner is to investigate.

In New Mexico, April 26th, the house considered in committee of the whole the medical bill and agreed upon a basis, which is practically the Texas law, which provides for an examination in diagnosis, but does not prescribe any school of medicine. Some amendments were made by an amendment requiring practitioners to be governed by the rules of ethics prescribed by the American Medical Association.

If Los Angeles or any other city is invaded by a serious epidemic of smallpox or any other disease, how much assistance will be rendered the Medical Profession by the Christian Scientists and all of those who are anti-everything-medical? Is it fair for the people to expect the Medical Profession to stand the brunt of such epidemics, when we are not given the control of their prevention?

Dr. H. P. Morrey of Santa Barbara, charged with prescribing morphine for habitual user, was discharged by a jury. In this we believe the jury did right. No physician should be in any way deterred from using any drug he believes to be required, in any case that may come for treatment. We are not in favor of the use of morphine in habitues, as a rule, but it would be unsafe to offer legal restriction to the use of any drug by physicians.

The Editor of the Medical Brief is evidently a reader of the Journal of the A. M. A.; two-thirds of the editorials in the April number are based on articles that appeared in the latter publication. But there is much else of interest in the April issue. We would especially mention a well-written and well-illustrated article, by B. L. Eastman, of Kansas City, describing and strongly advocating the Watkins' transposition operation for the cure of prolapsus uteri and cystocele.

The Los Angeles party inspecting Panama, sailing on the Sonoma in charge of Dr. and Mrs. Walter Lindley, representing the Los Angeles Chamber of Commerce, includes Alexander M. Hogy and wife, Dr. H. West Hughes and wife, F. Morris, wife and child, and Messrs. P. S. Brown, Daniel Rowan, Thomas F. Cooke, F. H. Garbutt, G. H. Brainerd, Dr. George L. Cole, Dr. E. M. Pallette, H. C. Oakley, George H. Murdock, William H. Metz, and Dr. Edwin A. Palmer. Bon voyage.

Dr. J. W. Flinn, as Secretary of the Arizona Society for the Study and Prevention of Tuberculosis, was tendered a banquet Tuesday, April 9th, at Kingman, at which nearly every business man in town was present. In an address in the Elks Opera House, that evening, Dr. Flinn gave a packed and attentive audience abundant food for thought. Incidentally, the people of

Kingman were advised to have clean-up days not too far apart—excellent advice that might well be applied to other places.

Clara Barton died April 13th, at the age of ninety, at her home, Glen Echo, Md. The end was due to valve lesions, following pneumonia. Letters, that have been made public since her death, show much mental suffering caused by intrigues of a clique of society women in Washington. We would that there were fewer of such parasites and more Clara Bartons. The distinguished founder of the Red Cross has left a monument that will endure as long as the memory of man. Such personalities are an inspiration to all of us.

Presiding Judge George H. Hutton, of the Superior Court, Los Angeles, has attracted the attention of thinking men by the advanced stand he has taken in advocating the rational treatment of the so-called insane and criminal classes. His Honor would parole many of the insane that are now incarcerated in asylums, and would consider every criminal as an invalid until competent physicians had declared him healthy. Undoubtedly the physicians of this region will do all they can to further the causes of humanity that Judge Hutton is championing.

It is reported in the daily press that a towel a yard long and a foot wide, with a red border, was accidentally sewed up inside Mrs. Mollie Myers in a New York Hospital, November, 1905. The woman holds the doctor responsible and is suing him for damages. Too bad to lose the towel, but just what the red border has to do with the case is not stated. However, the moral is plain: Count the sponges and towels, and make sure that neither these nor any of the instruments are missing after operation. Thus much embarrassment may be avoided.

The March issue of the Alumni Register of the University of Pennsylvania contains as a frontispiece a reproduction of a portrait of Dr. James Tyson, now on exhibition in the Academy of Fine Arts and later to be placed in the Medical Department. The portrait shows Dr. Tyson seated in a sick room, studying the patient's temperature chart, his stethoscope in his hand; the room is illuminated by artificial light, a flood of golden color falling freely on Dr. Tyson, while the patient in the background is in deep shadow. A nurse, standing at Dr. Tyson's side, serves as a connecting link between the doctor and the patient, glancing towards the bed, attentive both to any possible orders from the doctor or any needs of the patient. The portrait is truly a picture.

Major Madison Owens has been appointed a colonel on the governor's staff, and it is rumored that he is also to be placed on the Whittier state school board, where there is a vacancy

due to the recent resignation of Dr. Walter Lindley. The latter's service with the institution covered a period of more than twenty years. He was its first superintendent, and had been one of the trustees for nearly a generation. As his probable successor is a relative by marriage, the Lindley family, which is responsible not only for the reformatory but in a measure for the city of Whittier, undoubtedly will continue to have a sympathetic as well as a material interest in the school. Col. Owens was formerly an important spoke in the regular Republican organization wheel. He is a brother-in-law of Hervey Lindley, formerly the party organization leader in Southern California.

WANTED—A young physician, licensed in California, to locate in small city and devote a part of his time to institution work which will pay a salary. Address INSTITUTION, care of the Southern California Practitioner.

CORRESPONDENCE

COMMUNICATION REGARDING TUBERCULOSIS TEST.

Los Angeles, April 18th, 1912.

At the request of the Health Department of the City of Los Angeles, the City Council passed an ordinance, Nov. 28th, 1911, providing for the tuberculin testing of all cattle supplying milk to the city. The ordinance was passed because it has been proved that bovine tuberculosis is the cause of much tuberculosis in children. To safeguard the life and health of the little ones whose diet in the first five years of their life is so largely milk is the desire of the Health Department, and this ordinance is supplemental to the other measures already active to fight tuberculosis.

The Health Department was fortunate in securing for this diagnostic test the co-operation of the Department of Animal Industry at Washington, which offered six of their expert veterinarians to make these tests, free of charge to the dairymen. If tuberculous cattle are found in the herds, the ordinance provides that they must be segregated completely from the well cattle, and all milk from reacting animals, if used, must for a period of three years be pasteurized under municipal inspection. After that time, no milk can be sold in the City of Los Angeles from tuberculous cows. This ordinance was carefully framed to cause as little expense as possible to the

dairymen. It is in line with the most authoritative legislation for the protection of public health, forty-one other cities in the United States having adopted it. Pasadena has had a similar ordinance for nine years.

The dairymen, by referendum, have forced this issue to a popular election, which will be held the 28th of May.

Your well-known attitude on all subjects that pertain to the good of the community makes the Pure Milk Campaign Committee desirous of having your co-operation in this matter. We hope to have your name as one of an Advisory Committee of one hundred influential men and women. This ordinance has the unqualified support of the Certified Milk Commission of the Los Angeles County Medical Association, The Friday Morning Club, the endorsement of the Ebell Club, and the Los Angeles District of Federated Women's Clubs. Please do not neglect to speak to men and women of your acquaintance in support of this measure, and at your earliest convenience, let the Pure Milk Campaign Committee know if they may have the invaluable influence of your name and co-operation.

LOS ANGELES PURE MILK CAMPAIGN COMMITTEE,

By Mrs. Charles Farwell Edson,
Secretary.

MRS. EDDY.

April 10th, 1912.

Editor, Southern California

Practitioner,

Los Angeles, California.

My dear Sir:

In your March issue, there appeared the report of an address delivered by Dr. Theodore M. Davis of this city, entitled, "For Whom Shall the Physician Vote?" which was followed by a discussion by Dr. Nichols. The topics of the address and the subsequent discussion were Christian Science and its Founder and Leader, to whom Dr.

Nichols referred in most defamatory terms.

While we concede the right of everyone to their own views on any subject, we cannot allow such a foul aspersion to pass without protest, especially when it is applied to such a good, pure woman, through whose teaching mankind has been delivered from sin, sickness and disease to the extent that untold thousands rise up and call her blessed. It is difficult for us to conceive of a man so far forgetting himself as to refer in such derogatory language to any good woman, much less to one whose whole life was above reproach, and who, by a considerable number of eminent women, non-Christian Scientists, has been designated as among the 20 greatest women the world has produced. Moreover, Mr. Alfred Farlow of Boston, stated in a recent communication, "The writer has in his possession several hundred of the most excellent tributes paid to Mrs. Eddy by eminent persons outside the Christian Science movement, and on the event of her demise, the city council of her native city wherein she is best known, passed resolutions of regret and commended her life and character in the highest terms."

In "Science and Health with Key to the Scriptures" by Mary Baker Eddy, on page 151, we read: "Great respect is due the motives and philanthropy of the higher class of physicians. We know that if they understood the Science of Mind Healing, and were in possession of the enlarged power it confers to benefit the race physically and spiritually, they would rejoice with us."

That this broader view is shared by some of the medical profession is indicated by the following assertion made by Dr. Cabot within the past few weeks, that "Christian Science has done and is doing a vast deal of good, not only as a religion, but as a health

restorer." This, by the way, is the same Dr. Chabot whose ability and integrity is held in such high esteem by Dr. Nichols.

Therefore, in this same spirit of tolerance, justice and fairness, would it not be more becoming for our friend to refrain from such slanderous reference to the author of any good thing.

Thanking you in anticipation for your courtesy in giving space to this communication, believe me,

Sincerely yours,

Chas. E. Jarvis,

Christian Science Committee on Publication for Southern California.

AN OPEN LETTER

Mr. Hubert T. Morrow,

Attorney for the State Board of Medical Examiners and State Medical Society.

Dear Sir:

We have learned through the public press that during the past few months in the course of several addresses delivered before the Los Angeles County Medical Association and other medical societies, that you have taken occasion to make a number of most erroneous assertions concerning the National League for Medical Freedom.

In our communication to you of July 12th, 1911, replying to your favor requesting information concerning the League, we stated briefly the League's position in opposing compulsory medicine, and at the same time offered to furnish you with any further information desired covering our work. We regret you did not avail yourself of our invitation, for had you done so, we believe you would not have made the assertions above referred to.

About a year ago, Collier's Magazine attempted in a series of false and malicious editorials to break the people's confidence in The National

League for Medical Freedom by charging that it was instituted and backed by patent medicine interests and manufacturers of adulterated foods. To these editorials the National League for Medical Freedom, which was organized for the sole purpose of securing and holding inviolate for the people of the United States, the medical freedom which is their constitutional right, specifically replied, denying every charge made and offering to place at the disposal of Collier's, all the League's subscription books and records.

Again and again this offer has been made to traducers of the League all over the country, both by the National headquarters in New York and by the various branches in different parts of the country.

This offer has also been made here in California, to officials of the Los Angeles County Medical Association. It has not been accepted in a single instance. The failure to do this, leads us to but one conclusion. The persons making these charges do not want to be informed. They do not want to know the truth. They know if they carefully investigate the League, they will have to retract their false assertions and they prefer to go on making them.

The League has published its correspondence with Collier's in a little pamphlet, entitled: "The Facts about Collier's Attack on the National League for Medical Freedom," which we will be very glad to mail free of charge to anyone desiring a copy.

The assertion has also been made by you that not only was the League backed by the patent medicine interests, but by medical fakers, as well.

If, in the eyes of the Allopathic Medical Societies, osteopaths, homeopaths, eclectics and all other physicians differing from them in theory

and practice are fakers, then we bow to the charge, for our organization contains large numbers of the members and supporters of these independent schools. But who shall say, in this day and age, that any one school of healing has sounded the final note in the correct method of healing the sick and afflicted? Medicine is a progressive art, and not a science, and until the practitioners of the allopathic school can demonstrate their knowledge to a certainty, neither that school nor any other has the right to condemn as unscientific and irregular all other schools differing from them.

The National League for Medical Freedom is not opposed to sanitation and quarantine, and it has no quarrel with the faithful medical practitioner of any school. Nor is it opposed to the needed work of the state, county or municipal authorities along these lines, but is opposed to any clique of political doctors which seeks to dominate the legislation of state and national government for the purpose of increasing their power and furthering their own ambitions, all under the pretense of the public weal.

We desire in closing to call your attention to the personnel of our local advisory board. The names we here submit are those of men and women who stand for the best in city, state and national interests: They are, Hon. Leslie R. Hewitt, State Senator; Dr. J. A. Munk, Former President National Eclectic Medical Association; Hon. Lee C. Gates, State Senator; Hon. T. E. Gibbon, Chairman L. A. Board of Harbor Commissioners; Hon. Charles W. Bell, State Senator; Dr. Nettie Olds-Haight, Osteopathic Physician; N. D. Darlington, Member California State Highway Commission; Hector Alliot, D. Sc. Curator Southwest Museum; Hon. H. M. Hurd, State Senator.

Trusting you will give the above your careful consideration, we remain,

Yours truly,

The Southern California Branch
THE NATIONAL LEAGUE FOR
MEDICAL FREEDOM

MR. MORROW'S REPLY.

LOS ANGELES, CAL.,

April 30, 1912.

To the National League for Medical Freedom:

I received your open letter to me of the 23rd inst., in which you state, in effect, that in several addresses I have taken occasion to make a number of erroneous assertions concerning your League.

I regret that you did not specify particularly all the statements you refer to. You do specify, however, that I made the assertion that your League not only was backed by "patent medicine interests, but by medical fakirs as well." I have never publicly or otherwise made the statement that your League was backed by patent medicine interests, or anything that could be so construed. I have said, and still affirm, that all the vicious elements which hang on the heels of the medical profession, preying on the ignorance of the dying and helpless, are your most ardent admirers and supporters, and that those "interests" are praying for the success of the propaganda which you put forth. It matters not whether these human vultures belong to your organization, or openly espouse your cause. The bitter fact remains that they recognize in your League that they have the opportunity they have so ardently waited for.

To be frank with you, I had not, before receiving your last letter, taken sufficient interest in the backing of your organization to inquire whether the patent medicine interests were in-

terested in your League or controlling your acts. I had a suspicion that such was the fact, but now must admit that your own literature, enclosed in the above letter to me, has firmly fixed in my mind the truth of the accusation so often made against you—"that the patent medicine interests, or some other like vicious interests" are the powers behind you and responsible for your existence. In this connection I refer to the statement in your own literature, viz.,

"When the League was being formed it was recognized by its founders that the first effort to discredit the work of the League before the public would probably be to insinuate to the public that the League consisted of the manufacturers of poisonous nostrums and adulterated foods, etc."

It is an old saying which runs, "The guilty flee when no man pursueth," and the above quotation from your literature and your further statement, "that the earnest offers for help by certain food interests were declined" satisfy my mind that if the patent medicine and adulterated food interests are not responsible for your entrance into the world, they are, with or without the knowledge of your little branch, now directing the absurd fight you are making. I am not so unsophisticated as to think that the above "interests" would proclaim to the country that they were "pulling off a job" through your organization. Rather, I know that every act which would connect them with you would be carefully committed in the dark so that proof of it could not be dragged into the light. As to "Collier's" and their series of editorials in reference to your League, I leave you to fight the issue out with them. You'll find they are generally right, and am sure if they found they were mistaken, would gladly put you in the right light.

The significant fact that your lead-

ing newspaper exponent in the West has changed the policy of his papers since he has been giving unlimited space to your literature, and now carries in his newspapers advertisements of patent medicine, is but one of many links in a long chain of circumstances which tend to discredit your statement concerning the origin and the control of your organization.

I have never in your circulars seen the statement which last July you made to me by letter, viz., "Our efforts will favor the repeal of all laws and oppose the enactment of new legislation having compulsory features regarding any practice of medicine."

By your own admission, therefore, one of the reasons for your existence is to open the arms of our state to every charlatan, quack and unqualified medical practitioner in the country. The Christian Scientists, a great many of whom are members of your League, cannot be entirely responsible for your position in this regard, for, under our Medical Act, the Christian Science healers are excepted from the provisions of the law. It irresistibly follows, therefore, that you are, whether you know it or not, working for the interests of those persons and corporations who are waiting to attach themselves, like parasites, upon the weak, sick and ignorant of the public.

You justify your existence by reason of the so-called "Owen Bill" intended to establish what is known as the "United States Health Service." This bill as now reported out of Senate Committee provides that it shall not regulate the practice of medicine or the healing art, or interfere with the right of a citizen to employ a practitioner of his choice, or make any discrimination in favor of or against one school of healing; and that all appointments within the Health Service, including its head, shall be made without discrimination in favor of or

against any school of medicine or healing.

What reason, therefore, now exists for the continuance of your League's activities? Perhaps, because of the great dislike which Christian Scientists, as an organization, appear to have for the practice of medicine and surgery, your League is to continue in existence on behalf of its Christian Science members with the sole object of supplanting the great science of medicine and surgery with the practice of the black art and witch-craft of the darker ages. It does not seem possible to me that sufficient contributions could be received by you from your Christian Science members to carry on your fight for the last named purpose alone, for a great many individual Christian Scientists patronize physicians and surgeons for their ailments, this having been true of some of the families of your prominent members and supporters.

To those who are familiar with the above facts, it seems rather ludicrous to think that your Christian Science members alone are pushing you on to attack those whom they so often secretly rely upon. The great body of the public has too much common sense to support your evidently prejudiced and vicious attacks on the medical profession.

I wish to be fair to you, and only regret that you have stepped so far out of your way to make the brazen and unwarranted statements contained in your said letter of the 23rd inst.

In my work of attempting to clean out the fakirs and quacks who have been a disgrace to this community for so many years, your organization has indirectly been one of the greatest factors standing in the way of our success, and I begrudge the time which I am now taking in answering your letter upon the almost immaterial question

of whether the people behind you are acting in good faith or otherwise.

How much better it would be were you to devote the tremendous power of your well-financed organization to the elimination of quack and dishonest patent medicine advertising from the newspapers with which you seem to have such tremendous influence. How much better it would be were you to use your time and efforts to publicly and scathingly rebuke and attack the very patent medicine and adulterated food interests which wanted, as you say, to assist your League. Of course the above "interests" would not offer you financial support unless you are knowingly or unknowingly aiding and abetting them in their work. Your tacit admission that your propaganda is beneficial to the above "interests," is sufficient for me. The question whether they are paying you for the work is decidedly immaterial and can only be kept in the foreground to cloud the real issue.

Your League always shelters itself behind the able and eminent gentlemen who comprise your branch advisory board, which would seem rather absurd when we consider that their positions are doubtless honorary ones and they can have little, if anything, to do with shaping the course and conduct of an institution controlled from a national center.

In writing you, I do not do so as the representative of the State Medical Society, or the Board of Medical Examiners, or any other institution. My views may not be their views on these questions.

Whatever may be the ancestry of your League, or its present affiliations, it will be my constant regret that the effects of its actions must be detrimental to the public, and a menace to the community.

I trust you will give the above your careful consideration and that you will

give it the same publicity which I now understand you are asking for the open letter which you addressed to me.

Very respectfully,

H. T. MORROW.

THE COUNCIL.

By R. O. Butterfield, M. D. Ph. D.,
Los Angeles.

In the matter of consultations of physicians over patients, the Code of Ethics of the A. M. A., is full and explicit. All exigencies that may arise regarding any certain consultation, are covered at length by the Code or by implication, and if followed, the chief end of a consultation will be accomplished, namely, the welfare of the patient guarded, and also the credit of the attending physician protected.

When a physician is called into a case as counsel, generally speaking, there are only two conditions from which such an occasion will arise. The first one when the attending physician feels that he has done the best that he can and wants assistance, and second when the patient or his friends are not satisfied with the progress of the case.

Perhaps the physician honestly feels that he has done all that could be done for the patient, but also feels that possibly there may be some dissatisfaction by the patient or his friends, without any real reason, and the attendant would like some other physician's opinion to strengthen his position.

Whatever the conditions that call for a council, the consultant should remember that there are certain obligations to the patient, certain obligations to the attending physician, and certain ones due to himself that must be observed. Without the patient there would be no council, therefore, to say that the welfare of the patient must be the leading thought, is almost superfluous. The consultant should take the ground that the attendant has acted honestly and to the best of

his ability and, therefore "candor, probity and all due respect should be exercised toward" the latter, and the same treatment is due in turn to the consultant, on the ground that he intends to act honestly and to the best of his ability.

When a physician is called as counsel, he will be wise as well as ethical to express no opinion or to say nothing about the case until he is as fully informed as possible. By so doing he can do no harm, while harm may be done by talking, and later to have to withdraw an expressed opinion will cause humiliation. The fact that a man is called as counsel is a tribute to his ability, but to brag of it would simply cast a suspicion on his worthiness of the honor.

After the consultation, while the conclusions may be of interest to outside parties, the physicians had better not enter into a discussion with them, not merely because proscribed by the Code, but because the laity not being able to grasp all the circumstances, will form wrong conclusions and misapprehensions may arise. In private, the attending and consulting physicians should plan their statement to the patient or his friends and it should stop with that; to others they are not responsible.

There are two ways of going about a consultation. One is to have a conference between the counsel and the attendant before seeing the patient together, so the consultant can get as much information regarding the case as possible in advance. The other is for the physicians to meet the patient without any preceding conference. Then they may proceed with the examination of the patient along the lines laid down by the Code. Personally, when called as counsel, I prefer the first plan, although there are some objections to it.

If the first plan is followed, the con-

sultant must not become biased by the opinion of the attendant, so if later the consultant discovers points that seem to be at variance with what has been reported previously, he will not be misguided in his judgment. Full weight must be given to the attendant's ideas and opinions if he seems to have studied his case, for at least, he has had the better opportunity. But the consultant, with the permission of the attendant, should make his own physical examination, independently, and make it thoroughly, to see if his findings coincide with or differ from those of the attendant. If there is a perfect agreement throughout, all well and good. If there seems to be a disagreement on some points, it is well to call the attendant's attention to them unostentatiously, by asking him to examine such and such a point and whether he finds it this way or that, and see if he interprets it the same way as the consultant. In this way, obscure points may be cleared up. If the attendant has been careless in making his examinations, or shows inexcusable ignorance in the study and management of the case, the consultant must depend entirely on his own findings and draw his own conclusions independently of the opinions of the regular attendant.

After gaining all the information regarding the case from history, physical examination, or if need be from laboratory or microscopical examination, the real consultation is held in private. All points of agreement or difference are gone over and discussed thoroughly and plans for the future conduct of the case agreed on, as well as the statement to the patient or his friends.

This statement from the council is best given out by the attendant, and generally speaking should be as hopeful as possible under the existing conditions. Then the counsel may make a

statement on what has been concurred in. Generally the counsel can make some remarks which coming from him will sound better than if made by the attending physician.

If I find that I agree with the attendant in his diagnosis and management of the case, I like to speak freely with the patient or his friends, giving the attendant all the praise possible. This helps him in their estimation and the psychic effect is one which should always be kept in mind.

If a change of remedies seems best and a new line of treatment is agreed on, I always have the attending physician write the prescription, for to have the consultant do that would be to deprive the attendant of some prestige. It might even be construed that the latter was not able to write the prescription.

If the consultant differs in his opinion as to the previous management of the case, he should omit any mention of it. Such a statement would tend to work ill in several ways. It would tend to dishearten the patient and his friends and make them antagonistic to the attending physician and to disparage and injure him before the public. Since we should ever have the welfare of the patient in mind, this matter of disagreement on points of previous treatment should not be mentioned. If on careful deliberation, the consultant believes thoroughly that the course of management which has been followed has been injurious to the patient and if the attendant refuses to change from it in the future conduct of the case, then it becomes the plain duty of the consultant either to ask to have a third physician called into the council as a referee, or else to withdraw quietly from the case. Since each party of the council has to bear his full share of the blame or praise, according to the way the case goes, in the event of a serious disagreement in council and a referee

is refused, the consultant must protect himself, and he can do it in a safe and manly manner by his quiet withdrawal.

Sometimes the friends of the patient will try to consult with the physician who has been called in council, unbeknown to the one in charge of the case, trying to get some further statement regarding the case, or even to see if he will succeed the regular attendant if he is discharged. In the first event, no further statement should be made than was agreed on in the council chamber and what was given out afterwards. If asked to take the case, such offer must be refused point-blank. The only concession that he can

honorably make is to agree to see the patient by permission of and in consultation with the physician on the case.

Sometimes when the family of the patient has desired to have counsel called into the case, the attendant will oppose it as he feels it is a reflection on his standing, or perhaps knowing that he has poorly managed the case, he fears exposure. The consultant, under either circumstances will probably meet with more or less animosity at first, and he must be able to show a good deal of tact in what he does.

719 S. Alvarado St.

BOOK REVIEWS

NERVOUS AND MENTAL DISEASES.

By Archibald Church, M. D., Professor of Nervous and Mental Diseases and Medical Jurisprudence in Northwestern University Medical School, Chicago; and Frederick Peterson, M. D., Professor of Psychiatry, Columbia University. Seventh edition, revised Octavo volume of 932 pages, with 338 illustrations. Philadelphia and London. W. B. Saunders Company, 1911. Cloth, \$5.00 net; Half Morocco, \$6.50 net.

In this edition there have been over 150 interpolations of varying lengths, and over 300 minor corrections. The chapters on Meningitis, Aphasia, Poliomyelitis, Pellagra, and Pituitary Diseases have been largely rewritten. The various recent theories of the nature of hysteria have been briefly sketched. Descriptions of the conditions due to reduced pituitary activity have been introduced, with a short section on Oppenheim's congenital amyatonia. All in all, the work retains its position as the standard textbook upon the nervous and mental diseases. It is, in fact, two monographs, bound in a single volume for convenience. The portion dealing with neurology is written by Dr. Church, and that dealing with psychiatry by Dr. Peterson.

Following a number of quotations, the following **definition for insanity** is proposed as having the merit of brevity, if not of perfect adequacy: Insanity is a manifestation in language or conduct of disease or defect of the brain.

The law assumes to offer certain definitions of insanity, from which, however, those of medicine would tend to differ, in connection with the three chief points where law and psychiatric medicine meet:

1. A criminal is insane if he does an act whose nature and quality he does not know, or if, knowing the nature and quality of his act, he does not know whether it is right or wrong.

2. A testator is insane if his mind, memory, or understanding is unsound.

3. In a lunacy inquisition the subject of the inquiry is insane, if he is incapable of managing himself and his affairs.

Such are the divergent tests of insanity in law.

Formerly it was considered sufficient to describe a patient as of the ner-

vous, lymphatic, or sanguine temperament, and this has a certain value, but a better conception of the physical status is to be had from a study of the physiognomy of the individual, noting the stigmata of degeneracy, which may be conveniently divided into morphological and functional. These are described at some length. Thus, beginning at the crown of the head, the whorle of hair at the vertex which normally is close to the median line may be widely displaced or duplicated. And so on. It is interesting to note that septal deformities are included among the stigmata. Upon the part of the extremities, the upper and lower extremities may be disproportioned to each other or to the trunk. They may be mismated in length and development. The hands and feet may be too small or too large. (How about the lady who tries to wear a number two shoe on a number seven foot?)

The functional stigmata are divided into mental and physical. In estimating the various marks of degeneracy, it is clear that very few of them taken alone, would justify the classification of their possessor among the defectives and it is true that a very great number of the minor stigmata may be present in a given case, associated with strong mental, moral and physical attributes. All of them, from cleft palate to moral imbecility, are referable to defective development. However, in the presence of numerous indications of physical defect, we are entitled to expect the association of their mental and neural analogues.

The references to salvarsan are interesting. Thus, under the treatment of tabes, we find: Salvarsan, with or followed by mercury, may be used as long as Wassermann's blood test gives a positive reaction. The iodides are not used or recommended by the author at any stage.

In the treatment of active cerebro-

spinal syphilis, the exact value of salvarsan is not at this time clear, but it undoubtedly is of importance in the treatment of these cases. Conjoined with courses of mercury and iodid, it offers the patient the best prospect afforded by modern medicine.

Mental diseases, general treatment of insanity: It is possible that the discovery of Ehrlich of salvarsan may lead to a more certain means of destroying the germs of syphilis, and, while as an aid in the treatment of paresis it is apparently of no use, as a means of prevention of paresis it may prove successful. In paralytic dementia, Ehrlich's salvarsan ("606") has been used in a great many cases, but so far with rather harmful than beneficial results.

A COMPEND OF HUMAN PHYSIOLOGY, especially adapted for the use of medical students, by Albert P. Brubaker, A. M., M. D., author of a Text-Book of Physiology; Professor of Physiology and Medical Jurisprudence in the Jefferson Medical College; formerly Professor of Physiology in the Pennsylvania College of Dental Surgery; Lecturer on Anatomy and Physiology in the Drexel Institute of Art, Science and Industry; Fellow of the College of Physicians of Philadelphia. Thirteenth Edition, with 36 illustrations. P. Blakiston's Son & Co., 1012 Walnut St., Philadelphia. \$1.25 net.

This little brown book is too well known to justify any special description save that it corresponds with its excellent predecessors, and has been so revised as to bring the subject quite up to date.

MANUFACTURES: MISSOURI.

This advance bulletin gives the statistics of manufactures for the state of Missouri for the calendar year 1909, as shown by the Thirteenth Census. This shows that there were in that state 15 establishments manufacturing surgical appliances and artificial limbs, representing capital to the amount of \$83,020.00. The total expense of the industry was \$103,031.00, and the value of the products amounted to \$143,311.00. The value added by manufacture is given as \$121,126.00.

DIGEST OF COMMENTS ON THE PHARMACOPOEIA OF THE UNITED STATES OF AMERICA, Eighth Decennial Revision, and on the National Formulary, Third Edition, for the Calendar Year ending December 31, 1909, by Murray Galt Motter and Martin I. Wilbert, being Bulletin No. 79, Hyg. Lab. U. S. Pub. Health & Mar. Hosp. Serv., Washington.

This bulletin, like its predecessors, contains a fund of information. Like a mirror, it reflects more or less correctly the prevalent published opinions regarding these important works. These bulletins must be of great value to all who receive them. It would be well for the Pharmacopoea, so far as practicable, to cover all points about which doubt may arise between physicians and pharmacists, in prescription work.

But the pharmacopoea should, in no sense usurp the position of the "Dispensatories," which may legitimately be much more extensive in scope. As to the National Formulary, there is not much reason for its existence. Its contents might well be included in the Pharmacopoea and Dispensatories.

A HAND-BOOK FOR MEDICAL ADVERTISERS. By Henry R. Harrower, M. D., Chicago, Ill.

This is a neat little volume, in which the author shows the economy and advantages accruing to interested firms or individuals from the employment of the services of an expert advertising man who is also a medical man.

MISCELLANEOUS

REPORT ON MEDICAL DEPARTMENT OF UNIVERSITY OF SOUTHERN CALIFORNIA.

March 30, 1912.

California State Board of Medical Examiners,

San Francisco, Cal.:

Gentlemen:

At the last meeting of the Association of American Medical Colleges, the College of Physicians and Surgeons, Medical Department of the University of Southern California, situated in Los Angeles, was declared suspended from membership in the Association pending an investigation. Dr. Harlow, Dean of the Medical faculty of the University of Colorado, was appointed by the Association to investigate the standing of the college, and at the request of Dean Bryson, of the college in question, your president appointed Drs. F. R. Burnham and W. W. Roblee from this Board, a committee to co-operate with Dr. Harlow in the investigation of this school. We beg leave to report as follows:

We spent two days, March 25th and 26th, in this investigation, which we endeavored to make in a very thorough manner. It does not seem necessary that we should burden this Board with a report of all the minute findings of the committee, brought out in this investigation, but we submit the following summary of our work: In our investigation we took as a standard the constitution and by-laws of the American Association of Medical Colleges for the year 1911 and considered also the standards adopted by the council of Medical Education of the American Medical Association.

Records.—We found the records of the institution to be well kept. We submit with this report copies of the admission records and grade reports given to the students. A specimen sheet from the matriculation and college record and the roll call and class record used by the professors. We checked the records of the individual students and found that they were accurate. We looked with special care into the method of handling the en-

trance credentials; we found that these have been checked by Mr. Kinney, who was appointed for that purpose by this Board, and are pleased to report that Mr. Kinney's work has been very well done. We checked the credentials of individual students in a number of instances and were entirely satisfied that the requirements of Article 3 in the constitution and by-laws of the Association of American Medical Colleges were accurately followed. We find that this college is requiring a passing grade of 75% on all subjects below the senior year and that in the senior year a grade of 80% is required, whereas the Association places as its minimum a grade of 70%.

Course of Study.—This conforms to the minimum requirement in all branches and in many branches more than the minimum recommended by the Association is given. The Association requires a course of four years with at least 4000 hours of instruction to each student—we found that this institution was giving the four years of instruction but that 6912 hours is required of its students. We found that the subjects taught conform in numbers and hours with the requirements of the Association. Your committee would criticise the course in one respect—it is the custom of this college to require at the end of the senior year an examination in every subject taught during the entire medical course; we feel that this is throwing a very heavy burden upon the senior students and that it rather seriously interferes with the amount of clinical teaching that they are capable of taking. The American Medical Association recommends very strongly that the last two years of the medical course shall be largely clinical in character—the plan pursued by this college undoubtedly is a great help in enabling its graduates to pass the State Board of Medical Examiners, but we feel

that it does not allow the student all the clinical opportunities that the material controlled by the institution can furnish.

College Building.—Is situated in the Angelus Hospital grounds, a plan of which will be found in the annual catalogue which we submit herewith. This can best be described in the consideration of each department.

Equipment Standard.—1st. Dispensary.—The College Dispensary makes use of five rooms on the ground floor in the college building. The secretary's records show a total of 814 cases treated between January 1st, 1912, and March 25th, 1912—some of these cases, however, have undoubtedly been reported from more than one clinic so that the number of new cases would be somewhat less than this. This clinic has two graduate nurses in daily attendance and is conducted at from one to two o'clock in the afternoon. The service includes medical treatment, surgery, gynecology, and eye, ear, nose and throat. This service is in charge of a clinical committee of three instructors and employs eighteen clinic instructors. The clinic records are so poorly kept that it was not possible for us to judge the quality of service being rendered the students. For this work the senior class is divided into four sections, six men in each section—these sections are rotated from one department to another. The men in charge of this work are well known medical men and there is no reason why they should not give good service. Your committee criticises the records kept and has assurance from the Dean that this system will be changed at once.

2nd. Obstetrics.—The requirements that five cases shall be seen and attended by each senior student probably is fulfilled. Cases are referred to this clinic by the Los Angeles Municipal District Nurses and they have

also one-half of the obstetric service of the Los Angeles County Hospital.

We were unable to ascertain the exact number of cases which have been attended during the past year. This department is supplied with an obstetrical mannikin, a skeleton pelvis and foetal head for teaching purposes.

3rd. Museum.—Specifications as laid down by the Association are well covered except in two points—the pathological specimens while abundant, have not been worked up, only thirty-six mounted specimens being on the shelves. We found no embryologic models.

4th. Library.—Consists of about 400 volumes, most of them old and of no value for the student reference. A number of the newer books have been added within the past month and others are promised. There are a few good medical journals on the file. In this connection it should be noted that these students have access to the Barlow Medical Library, consisting of 10,000 volumes, and the general library of the University of Southern California, containing 17,000 volumes. These are both within fifteen minutes' ride of the school.

General Equipment.—The general equipment for all departments is fair; there is enough apparatus at hand to answer for all the ordinary teaching.

Anatomy.—The committee takes great pleasure in unqualifiedly commending the department in anatomy. Prof. Harry O. White is an enthusiast in this work. His equipment, consisting of original charts, anatomical preparations and other prepared specimens, is of exceptional worth. Prof. White has five assistants and the work much more than conforms to the Association requirements.

Departments of **Pharmacology** and **Physiology**—under the direction of Prof. Stookey with one paid assistant meets with our commendation. All ar-

ticles of equipment required by the Association are in use by him.

Departments of **Histology**, **Embryology** and **Pathology** are under the leadership of Prof. Leonard, with one paid assistant. Here we found very good work was being done and the Association requirements are being well met.

Department of Chemistry and Bacteriology are in charge of Prof. Wagner with one paid assistant—apparently conducted in accordance with the Association rules, and we found sufficient equipment to conform thereto. We are able, so far as the laboratory branches are concerned, to report that they are on a very satisfactory basis, both as to leadership and equipment. The professors are all on full pay; these, together with the three paid assistants, make up the six salaried instructors that are recommended by the American Medical Association Council. The departments of **Anatomy** and **Physiology** are on an especially satisfactory basis. The students are handled in sections, thus obviating the overcrowding which might occur otherwise in the laboratories. It will be necessary for the school to have more spacious quarters if the number of students enrolled increases materially.

The Amphitheatre where the general lectures are held is well lighted and ventilated. Ventilation is secured both by windows and a special forced ventilating system, operated from the basement—this ensures fresh, pure air in all the rooms of the building. The Amphitheatre is provided with a first-class Stoeling projectoscope, together with a large number of charts for gynecological, anatomical, eye, ear, nose and throat teaching. Electro therapeutics.—There seems to be no first-class electro-therapeutic equipment in the college building. We were informed that students in this branch were taken to the private equipment of Dr. Kinney, the instructor of elec-

tro-therapeutics, for instruction in this branch.

County Hospital Clinic.—This school has full clinical charge of one-half the beds in the Los Angeles County Hospital. This institution now has 650 beds, which number will be increased to 1000 upon the completion of the new surgical building. There were 638 patients admitted to this hospital during the month of January, 1912. These patients are assigned to the University of California Medical School and the medical department of the University of Southern California in rotation as they enter the hospital. Members of the senior and junior classes in this college attend clinics from eight to twelve A.M. three mornings each week. One-half of this time is given to surgical work, the other half to medical demonstrations and "ward walks." The professors and instructors in charge of the County Hospital clinic are all men of excellent standing in medicine and surgery and they should be able to give these students first-class training. Your committee doubts very much whether this material is being used to the best advantage. Here, as at the College Dispensary, the case records are not well handled by the students. At the County Hospital dependence is placed largely upon the records made by the interne and the student thus loses much valuable training. There is no provision for laboratory diagnosis conducted by the students at the County Hospital. The laboratory work is done largely by the Hospital pathologist—postmortem sections are made by the professor in pathology every Sunday. These are fairly attended by the students. Postmortem material is abundant enough to furnish first-class instruction, but the committee questions the advisability of undertaking to hold any Sunday demonstrations along this or any other lines. We desire again

to state that, in our opinion, the clinical material both at the County Hospital and at the College Dispensary could be utilized much better if the same students were not required to carry the large amount of didactic work which is required. The quality of the clinical teaching, your committee was unable to determine in the short time at its disposal. So far as we could gather from reports, the professors and instructors are in regular attendance. There has not been a checking system which would make this information entirely reliable. This the Dean has agreed to institute.

Your committee had an interview with President Bovard of the University of Southern California and learned from him that the medical department is an integral department of the University and that the University is pledged to further its development in every way possible. He outlined to us some plans for endowment and development which the trustees have pledged themselves to bring about at the very earliest possible time.

Summary: From the above investigation your committee believes that this institution is an acceptable medical college in accordance with the standard set by the American Medical Association, although it was not so listed in the report given in the Journal August 19th, 1911. It certainly should rank as a good "Class B" college. In our opinion, it comes well within the qualifications and outlines of the constitution and by-laws of the Association of American Medical Colleges as amended February 28th, 1911. Some of the important additions in teaching force and equipment are a comparatively recent acquisition and it is quite probable that a report made at this time would be different from one made prior to the American Medical Association report. Now, as to the suspension of this college, your

committee was informed by the Dean that only three inspectors, to their knowledge, have ever visited the college prior to this time.

Dr. Dudley Tait inspected the college thoroughly three years ago for the California State Board of Medical Examiners, Dr. Caldwell of the educational department of the American Medical Association visited the college in January, 1912, in company with Dean Bryson. The Dean informs us that the entire inspection did not consume over one hour's time. Dr. Carr of the National Confederation of Licensing Boards visited the college early in February and spent about one-half of the day in the inspection. The Flexner inspection, upon which the report of the Carnegie foundation was based, was never made so far as any person connected with the college is aware. If Mr. Flexner made an inspection, it was done so unobtrusively that no one connected with the college was aware that he was about the institution. It took us two full days to go through the institution with reasonable thoroughness under the guidance of a man who is an expert in that line of work. It does not seem possible to us that an intelligent report could have been made by either Dr. Caldwell, Mr. Carr or Mr. Flexner in the time they gave for that purpose. The first intimation that this college had of any contemplated action being taken was when the Associated Press dispatch came to the newspaper informing them of the fact. We saw copies of the telegram and letters sent to Fred C. Zapffe, Secretary and Treasurer of the Association of American Medical Colleges, on March 2nd; another letter was sent on March 14th, in which the Dean of this college requested information as to what charges had been made against the institution wherein they were deficient—up to the date of our inspection, March 26th, no reply

was vouchsafed them. Dr. Harlow, the accredited representative of the Association, in the inspection made by us, professed also to be in ignorance as to why the college had been dropped. This action was clearly a violation of the constitution and by-laws of the Association—see Article 7, Section 4, of the constitution, and Section 7, also Section 12, rules 2, 3, 4 and 5, in the by-laws. In these sections it is clearly stated that charges and specifications must be presented to the accused for answer before any action is taken. This college, up to March 26th, has not been served with any such papers. To us it seems that this action taken by the Association was not only unjust, but clearly illegal. We see no reason why this Board should refuse to accept the diplomas from this institution.

Very respectfully,

The above report was presented and read at the April meeting of the State Board of Medical Examiners, held in San Francisco. On motion of Dr. Barbat, seconded by Dr. Reinhardt, the report was approved and adopted and the committee discharged.

JOHN H. MUSSER, M.D., LL.D.

The President of the United States during his recent visit to Los Angeles, while discussing universal world-wide peace, very correctly remarked that there are other types of heroism than that seen on the battlefield.

My friend John Musser visited our mutual friend, William Osler, last summer and returned home to Philadelphia with the knowledge given him by his accurate diagnostician that he was to die within a few months, that he should relinquish his work and endeavor to relieve his distressing symptoms. This hero, however, returned to Philadelphia and his work in full activity; he said nothing to family or friends of the knowledge that Osler had imparted to him, but gave himself unsparingly and freely to his professional duties until he could no longer

fill them from lack of physical strength. Then he informed his intimates that the end had come. Dr. Musser faced the last enemy undaunted, passing into another world thinking only of others, committing himself in simple trust to the Eternal Goodness. Is this not more heroism than facing guns and cannons with cheers and comrades?

John H. Musser was born in Strasburg, Lancaster County, Pennsylvania, June 22, 1856 and died at Philadelphia April 4, 1912. He was 55 years old. After a preliminary education at the State Normal School he graduated from the Medical Department University of Pennsylvania in 1877.

It was my good fortune to know him long and intimately in his work, during the earlier years of our career we occupied similar positions in succession in the University of Pennsylvania.

He was resident physician in the Philadelphia Hospital, medical registrar at the University Hospital, chief of the Medical Dispensary of the University Hospital, instructor in Medicine, Medical Institute instructor in clinical medicine, University of Pennsylvania medical department, 1884-1888; pathologist to the Presbyterian Hospital, 1884-1888; assistant professor of clinical medicine, University of Pennsylvania, 1889-98; President of the Pathological Society, 1895-1897; President of the Phila. Co. Medical Society, 1899; president of the Philadelphia Medical Club; member of the Council of the Association of American Physicians, 1893-98, president of the American Medical Association 1903. He was a fellow of the College of Physicians, a member of the Phila. Co., Medical Society, the Pennsylvania State Medical Society, the American Medical Association, the Association of American Physicians, the American Climatological Society, the Philadelphia Neurological Society, the Philadel-

phia Pathological Society, the Medical Society of Ontario, the Harrisburg Academy of Medicine, honorary member of the Medical Association of the State of New York and of the South Carolina Medical Society, Fellow of the American Association for the Advancement of Science and of the Virginia Medical Society.

At the time of his death Dr. Musser was connected with the Medical Staff of the University of Pennsylvania, physician to the University, Philadelphia and Presbyterian Hospitals; consulting physician in the West Philadelphia Hospital for Women, Germantown Hospital, Chestnut Hill Hospital, Jewish Hospital and the Mercy Hospital of Springfield, Mass. He was the author of a well-known work on "Medical Diagnosis." In the *Cyclopedia of Diseases of Children* that Keating and myself published some years ago he wrote articles that have become classics. He contributed to a number of standard works, as Hare's *System of Therapeutics* and Wood's *Reference Handbook of Medical Sciences*. Edited volume IV of *Nothnagel's Practice* and very recently published a three volume treatise on "Practical Treatment," which is the last occasion in which I had the pleasure of being associated with him in professional work. At the time of his death he was a member of the Union League, the Rittenhouse, the University and the Franklin Inn Clubs, and a trustee of the Drexel Institute.

In 1880, Dr. Musser married Miss Agnes Harper. He is survived by three daughters and one son, Dr. John H. Musser, Jr. The death of Dr. Musser has deprived the world of a useful, unselfish friend and the medical world of a faithful servant. While he was a scientist and a scholar of international renown, his learning and skill were freely placed at the service of the ignorant, the lowly and needy.

To me his strongest characteristic was that he never lost in a narrow specialism the broader field of a general practitioner.

The strong, broad, personal influence that he carried to his classes and to the sick room, either as attendant or consultant, will remain long after his passing, a heritage to the better traditions of medicine.

In these days of medical cults, fads and heresies, Musser's personality is an inspiration to the art and science of rational medicine. To us Philadelphians, who perhaps knew him most intimately, he stood for all that is best and highest in the distinguished annals of medicine in that city—the cradle and the home of rational medicine on the Western Continent. At the funeral on April 4th, the honorary pallbearers were: Dr. Edgar Fahs Smith, provost of the University of Penn.; George F. Baer, president of the Philadelphia and Reading Railway; Dr. Chas. Curtis Harrison, former provost of the University of Penn.; William U. Hensel, former attorney general of Pennsylvania; Dr. S. Weir Mitchell, the noted physician and author; M. Hampton Todd, former attorney-general of Pennsylvania, Associate Justice S. Leslie Mestrezat, of the Supreme Court; Judge Charles Y. Audenreid, of Common Pleas Court; William Lyttleton Savage; Joseph S. Neff, Director of the Dept. of Health and Charities; Edwin M. Herr, of Pittsburgh; Edward Martin, former Director of the Dept. of Public Health and Charities; Dr. George A. Piersol; Dr. James M. Anders; Dr. John G. Clark; Dr. John H. Girvin; Dr. Alfred H. Stengel; Charles Matthews; Rudolph Ellis, president of the Fidelity Trust Co.; Judge John B. McPherson, of the United States Court of Appeals; Simon Gratz, president of the Board of Revision of Texas; James McAllister, president of Drexel Institute; John

Sailer; S. W. Colton, president of the Four Mile Oil Co. and the Guyandot Land Association; Dr. George de Schweinitz; Dr. Francis X. Dercum, of Jefferson Hospital; Dr. Hobart A. Hare; Lawson C. Funk; Dr. Thomas Branson.

A group of former pupils of Dr. Musser, who are now well-known in medical circles, comprised the active pall-bearers. They were: Dr. William E. Hughes, Dr. Joseph Sailer, Dr. James E. Talley, Dr. George W. Norris, Dr. Howard Fussell, Dr. George Morris Piersol, Dr. Herman B. Alyn, Dr. Harry Toulman, Dr. Charles A. Fife, Dr. M. B. Gwyn and Dr. Edward Goodman.

William A. Edwards.

ANOMALOUS INTESTINE OF INFANTS.

I am writing this article for the purpose of impressing upon the minds of the medical profession the value of our anatomical search and autopsy work.

While working in the anatomical laboratory of the college, upon the body of a newly born child, Dr. H. O. White, Professor of anatomy at the College of Physicians and Surgeons of the U. S. C. and I discovered a peculiarly interesting and novel condition. We made four transverse sections through the body, one at the level of the root of the lung, one at the level of the diaphragm, one at the umbilicus, and one at the level of the iliac crests, thus making four sections in all. Examination of the viscera in the upper sections revealed nothing of ab normal interest, that is, all the organs were in their proper positions and relative relationship. On examination of the intestines, however, we found a condition which neither Dr. White nor I have ever seen or heard of before.

The first thing which attracted our attention, was that what apparently

seemed to be the caecum on the right side was continued on down into the pelvic cavity as the rectum. Further examination revealed the absence of a normal sigmoid on the left side, and on raising this, which was apparently sigmoid on the right side, we found, in its proper position, a somewhat hardened and atrophied caecum, with an appendix attached and an ascending colon also hardened, atrophied, and having a very much thickened wall with a small lumen. When the ascending colon reached the under surface of the liver, instead of having a normal hepatic flexure, there was a decided kink with a very perceptible constriction of the colon at this point. From here on, the transverse colon was enormously distended with meconium, and was very thin walled. The transverse colon extended over to the left side, and instead of turning at the spleen, another interesting anomaly presented itself. The colon passed underneath the left kidney, up behind it for a short space, where it was again anaemic and hardened, and then passed down as the descending colon, again enormously distended with meconium. On reaching the iliac region of the left side, we found the most peculiar abnormality in the course of the sigmoid flexure, that, I believe, has ever yet been discovered. One does not get as good nor as vivid a picture from a description of the condition as from having actually observed the specimen. The bowel, as I said, reached the left iliac region, and from here it suddenly turned to the right and passed transversely across the pelvis with a mesentery attached at the level of the brim of the pelvis as far as the right iliac region and directly in front of the caecum and ascending colon. Here it took a turn backward, inward, and downward to the middle line and passed down as the

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rectum. All this part also being enormously distended and thin-walled.

It was rather unfortunate that I was unable to obtain the history of the child's birth, but to all intents and purposes, it was very apparent that the child must have died from a very acute obstruction of the bowel, sometime after its birth, as it gave evidence of having lived. There also seemed the possibility that the sigmoid, in its abnormal position in front of the caecum and ascending colon, might have exerted so much pressure, it being so enormously distended, upon the ascending colon, that the latter became atrophied and had its lumen obstructed. At any rate, the condition is well worthy of discussion and ought to be taken note of by the profession, as one of the rare conditions with which we

have to deal. This anatomical transplantation of the sigmoid flexure of the colon being, of course, one very important example which will serve to prove the point I wish to bring out, and that is the necessity of more elaborate and extensive study of post mortem conditions, that we may perfect ourselves in the normal as well as the pathological conditions in the anatomy of the human body.

James Steinberg, M. D.,
Los Angeles, Cal.

1414 S. Hope St.

ASEXUALIZATION.

The April issue of the Texas Medical Journal is largely taken up with this subject. In an article by Dr. G. Henri Bogart, of Paris, Illinois, the California law bearing upon this subject, is criticised upon the ground that it is practically confined to the habitual criminal, whose procreative course is usually run before he becomes eligible to treatment. The California law is as follows:—

Whenever in the opinion of the medical superintendent of any State Hospital, or the superintendent of the California Home for the Care and Training of Feeble-minded Children, or of the resident physician in any State prison, it would be beneficial and conducive to the benefit of the physical, mental, or moral condition of any inmate of said State Hospital, home or State prison, to be asexualized, then such superintendent or resident physician shall call in consultation the general superintendent of State hospitals and the secretary of the State Board of Health, and they shall jointly examine into all the particulars of the case with the said superintendent or resident physician, and if in their opinion, or in the opinion of any two of them, asexualization will be beneficial to such inmate, patient or convict, they may perform the same; provided, that in the case of an inmate or convict confined in any of the State prisons of this State, such operation shall not be performed unless the said inmate or convict has been committed to a State prison in this or some other State or country at least two times for some sexual offense, or at least three times for any other

crime, and shall have given evidence while an inmate in a State prison in this State that he is a moral or sexual pervert; and provided, further, that in the case of convicts sentenced to State prison for life who exhibit continued evidence of moral and sexual depravity, the right to asexualize them, as provided in this act, shall apply, whether they have been inmates of a State prison either in this or any other State or country more than one time. (Statutes 1909, p. 1093.)

GREATER NEW YORK NUMBER.

In June the American Journal of Surgery will issue a number composed of original contributions from men of recognized prominence in the medical profession, residing in Greater New York. Among those to contribute are: Herman J. Bolt, C. N. Dowd, Meddaugh Dunning, Wm. S. Gottheil, E. L. Keys, Jr., Howard Lienthal, Chas. H. May, Willy Meyer, Robt. T. Morris, S. Lewis Pilcher, John O. Polak, James P. Tuttle, James P. Warbasse and others.

Contributions from these well-known men should make this issue of particular interest and value.

Hon. J. W. McKinley, Ex-United States Senator, Frank P. Flint, Gurney Newlin, Esq., Oscar Lawler, Esq., Capt. John D. Fredericks, Esq., District Attorney of Los Angeles County.

Song by Mr. James P. Burns.

OUR DUMB ANIMALS.

Our Dumb Animals would be an admirable book for the physician's waiting-room, if it were not for an occasional inane outburst like the following, taken from page 163 of the present volume:—

There, little dog—don't moan—

They have grafted your heart, I know,

To a cat's left lung, and your jaws are hung

In jars at a doctor-show;

But they'll print your symptoms all alone—

There, little dog—don't moan!

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has always been found especially valuable in that restoration of the appetite so often regarded as the first necessity in the correction of disorders of digestion due to decreased secretory activity. As it

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MEDICAL SKEPTICISM.

"It is pretty hard to teach an old dog new tricks."

Doctors are the most skeptical of human beings. You may confront them with overwhelming evidence of the value of any method or remedy and they will either say nothing, or all too frequently say something derogatory.

It is right that those dealing with human life should be careful, but it would seem that too much skepticism is liable to defraud the medical profession of much good which might otherwise come to them.

Harvey's "theory" regarding the circulation of the blood was laughed at for years.

Pasteur at first met with opposition of the most pronounced type.

It took Lavern over fifteen years to get his ideas regarding the transmission of malaria accepted by the medical profession.

Bier, notwithstanding his high official position as physician to the Emperor of Germany was called a dreamer when he first advocated his theories of hyperemia. These "theories" now have been demonstrated over and over again and they no longer are an experiment.

Bier's Erectruss is an application of this principle to cases of impotency that every wide-awake physician should get acquainted with. Houston Bros. Co., Chicago, Ill.

"Kelene (Fries Bros.) does not of itself leave any unpleasant sensation behind; 4 c. c. will give nearly a minute and a half, and in a prepared patient can be repeated continuously with safety. Kelene and A. C. E. make an easier combination than Kelene and ether for those who like A. C. E. (the usual anaesthetic at Guy's)."

Kelene is also recommended for the introduction of A. C. E. anaesthesia by the Resident Medical Officer in Bright. In a lecture before the Physical Society on February 10, 1903, reported in Guy's Hospital Gazette for April 11, 1903, on "Postoperative Treatment of Abdominal Section," he states that in grave hemorrhages, "the ideal anaesthetic is A. C. E. or Kelene followed by A. C. E., given slowly and pressed slowly to deep anaesthesia and then relaxed to just short of movement."

A DEATH FROM SALVARSAN.

At the last session of the Société Française de Dermatologie et de Syphiligraphie, Dr. Balzer, physician of the Paris hospitals, and Mlle. Coudat reported a case of a patient who had a chancre on the chin and mucous plaques in the throat, but no other apparent lesions. He received a first injection of 0.3 gm. of salvarsan; a little fever and some nausea resulted. A second injection of 0.3 gm. made a week afterward produced no trouble until four days later, when delirium appeared with carphology, inequality of the pupils, stiffness of the neck and epileptiform convulsions. A lumbar puncture drew out a liquid rich in albumin and poor in leukocytes. The patient fell into coma and died on the third day. A second lumbar puncture showed arsenic in the cerebrospinal fluid.

Nine other patients who had received injections at the same time as the previous patient had no complications. The solution, therefore, cannot be blamed. Dr. Balzer believes that there is an un-

equal distribution of arsenic in the system, the nervous centers having an especial affinity for this product.—*Journal A. M. A.*

THE TREATMENT OF ECZEMA IN INFANTS.

A. B. Marfan lauds the favorable influence of altitude in the treatment of the severe generalized forms of eczema, when the itching and irritation are intense, and the child cannot sleep and loses appetite. If such a child be sent up into a mountainous place at an altitude of 1000 to 1500 meters, after a week or so the child will be able to sleep and eat, the eruption will become dry, and soon the little patient will be able to go home without having more than a transient return of his trouble. Since this disease is generally self-limited at about two years of age this treatment allows us to tide over until that favorable period has been reached.—*Le Bulletin Medical.*

The late Alfred Tennyson Dickens, who died suddenly in this country a few weeks ago, had a big name to carry about with him, Alfred Tennyson, after the poet, and Dickens, after his father. According to all accounts he bore his load gracefully. He was a man of attractive manners, and made many friends while he was in this country. His father, the great novelist, it will be remembered, died suddenly at a dinner table in 1870. The son did not die in so public a manner, but he died from the same cause, acute indigestion. It is a wonder that more of our distinguished foreign guests do not die of indigestion while they are with us, considering the number of big dinners that they are obliged to eat in public and private. A big dinner seems to our simple American mind the most complimentary way of showing a distinguished guest how much we appreciate him.



DR. WALTER LINDLEY LANDING AT LOS ANGELES HARBOR.*
Return from Panama Where He Went as Delegate of the Los Angeles Chamber of
Commerce.

*Courtesy Los Angeles Times.

SOUTHERN CALIFORNIA PRACTITIONER

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No. 6

Editor,
DR. GEO. E. MALSBARV.

Associate Editors,

Dr. Walter Lindley, Dr. John W. Flinn, Dr. Elbert Wing, Dr. Ross Moore, Dr. George L. Cole, Dr. Cecil E. Reynolds, Dr. F. M. Pottenger, Dr. William A. Edwards, Dr. Kaspar Pischel, Dr. Andrew W. Morton, Dr. H. D'Arcy Power, Dr. William W. Roblee.

MALTA FEVER IN ARIZONA, WITH A PRELIMINARY REPORT OF CASES.*

BY C. E. YOUNT, M.D., PRESCOTT, ARIZONA, AND R. N. LOONEY, M.D.,
PRESCOTT, ARIZONA, SUPERINTENDENT STATE BOARD OF HEALTH.

The incidence of Malta fever in the United States antedates its recognition, by at least two decades. In 1905 Captain C. F. Craig,¹ Medical Corps, U. S. Army made what is probably the first report of a case of Malta fever originating in the United States. This case was a nurse in one of the Washington, D. C. Hospitals, who it was thought contracted the disease from nursing infected soldiers. He also reported nine cases in United States Soldiers, who had become infected in the Philippine Islands; and in that same paper called the attention of the Medical profession to the fact that a careful study of the obscure continued fever cases in reference to the Widal test and the agglutination reaction with the micrococcus melitensis, would demonstrate that Malta fever was by no means a rare disease in the United States.

Nearly six years elapsed before the next cases were reported in the United

States. These were really the first cases to be reported in the United States as having been infected directly from goats. First Lieutenant Thomas L. Ferenbaugh,² Medical Corps, United States Army, while stationed with United States Troops at Del Rio, Texas, reported five cases of Malta fever occurring among those engaged in the goat industry in the Pecos river country.

Following his communication to the Surgeon General of the Army, Lieutenants Ferenbaugh and Gentry³ were ordered to establish a field laboratory at Langtry, Texas, and study the situation. They reported seven other cases of Malta fever as well as having made bacteriologic investigation of the goat herd, which was the probable source of the infection. Their careful scientific work enabled them to announce the uncontrovertible conclusion that Malta fever existed in Texas,⁴ and had probably been endemic in one district,

*These cases were reported at the Twenty-first Annual Session of the Arizona Medical Association, Bisbee, Arizona, May 7th, 1912.

at least, for the past twenty-five years.

This very valuable report promptly focused the attention of a few interested medical men upon the other principal goat raising States of the United States, as doubtless harboring cases of Malta fever among those engaged in the goat industry. The five States having over 100,000 goats according to the United States Census of April 15th, 1910 (data kindly furnished by Dr. Hugh A. Brown) are as follows:

Texas, 1,135,244, New Mexico, 412,050, Arizona, 246,617, Oregon, 185,411, California, 138,413, all other States, 797,390.

In February 1912 we received a circular letter from Dr. E. S. Godfrey, Jr., then Territorial Superintendent of Health, inquiring concerning the existence of Malta fever in our section of Arizona. These inquiries were sent out at the suggestion of Dr. Hugh A. Brown, of Washington, D. C., who believed that in-as-much as Arizona was credited by the Census Bureau in 1910 with over 240,000 goats, Malta fever might be expected to exist there as well as in Texas.

Our reply to Dr. Godfrey's inquiry was in effect, that up to that date (February 11th, 1912) we had not treated any cases which we had diagnosed as Malta fever, but recalled having treated three cases of fever during June, July, August and September, 1911, among people engaged in the goat industry. This fever was of irregular type, long duration, and accompanied by "relapses," to say the least resembling an atypical typhoid.

On February 22nd, 1912, one of us, (Yount) saw a case of orchitis in a goat herder, which appeared as a sequela of a fever that began in June, 1911, and lasted until September. The symptoms recounted by this patient presented such a classic picture of

Malta fever that we at once set about to establish, as it were, a posthumous diagnosis of Malta fever in this patient, and the other cases mentioned, which we give under "Report of Cases."

REPORT OF CASES.

CASE I.

R. F. W., white, male, age 47, nativity Georgia, goat herder, working for "Case III," Wagoner, Yavapai County, Arizona. Only diseases he recalls having had are typhoid fever, pneumonia and chills and fever, otherwise enjoyed good health until June, 1911.

Never had any venereal disease. Slept just outside goat corral, each morning would awaken covered with dust kicked up by the goats. Drank freely of goat's milk.

In June present disease began with fever and malaise, could scarcely drag himself after the goats. Had two miles to walk twice a day following the band and it would seem like the distance was interminable and that he could not drag himself another step.

Pain and aching in every bone, was feverish and thirsty and drank more freely of water and fresh goat's milk, but still continued to herd the goats. During July the fever and aching were worse so that he could not herd the goats, but got a light job as camp cook. Was chilly at times and had profuse perspiration at night.

"Took to bed" August 4th, but never remained in bed all day, was never delirious, had a good appetite and always got up for his meals. Usually chilly at night after profuse perspiration. Obstinate constipation from the first, but never noticed any bloating of bowels.

This condition lasted about two months. Did not consult a physician, nearest one being 50 miles away. His friends diagnosed his disease as ty-

phoid fever, but he states that he had had both typhoid and malaria and this fever was different.¹

During September he had no chills and sweating, but was very weak and pale and had lost 15 pounds in weight. Had "rheumatism" in right hip, right leg and both shoulders, and constipation continued obstinate.

October—No fever, chilly sensations or sweating, but "rheumatism" continued, constipation overcome by laxatives.

November—Worked right along, but still had rheumatic pains in right hip.

December—Continued to work, but pain in right hip and right ilio-inguinal region continued.

January—Same as December.

February, 1912—Rheumatism in right hip and right ilio-inguinal region continued. About first of February developed headache, fever, pain about right hip bone and right ilio-inguinal region. About 4th of February right testicle began to swell, accompanied by slight chills and constant chilly sensations. February 22nd, came to Prescott. Right testicle swollen to about four times normal size and very tender to pressure. Temperature 102. Sterile needle and syringe used to draw off blood and serum from testicle. Fluid placed in sterile tubes and hermetically sealed. These tubes were sent to the Laboratory of the Army Medical School at Washington, D. C., for agglutination with the micrococcus melitensis; Major F. F. Russel in charge of the Laboratory reporting on March 4th, 1912, as follows: "The specimen sent in by you for agglutination with the micrococcus melitensis gives a positive agglutination in a dilution of 1 to 160." (This six months after the height of the attack.)

Several attempts were made to grow the organism from the fluid drawn from the scrotum (epididymus and testicle)

at 37 degrees C. on potato, milk, lactose-litmus-agar and agar. The cultures were always "mixed" three different organisms being found in practically all the media, a long bacillus, a short bacillus and a very few cocci. Some of the cocci were Gram negative, but to date owing to our lack of plating facilities we have not been able to separate these small cocci from each other and isolate them in pure culture.

April 24th, 1912—Patient writes from Wagoner that swelling and inflammation has all gone out of right testicle and all pain out of right ilio-inguinal region, but that he now has a severe rheumatism in left side, back, hip and ankles.

Case II.

Mrs. S. W. H., white, female, age 28, engaged in goat industry near Wagoner, Arizona, used goat's milk on cereals. Previous health excellent, weight 190 pounds.

About April 25th, 1911, began to experience headache, malaise and fever. Came to Prescott on May 8th. Temperature 102. Sent to hospital for treatment. Fever continued for two weeks, afternoon range from 101 to 103 degrees F., with profuse perspiration each night and obstinate constipation. Absence of rose spots and diazo reaction. Pain in head and back of neck intense. Neuralgic pains and tenderness in palms of hands and soles of feet. This patient had five distinct relapses between May 8th and August 20th. Accompanying the last three relapses there was severe cough with expectoration of white glairy spittle (tubercle bacilli negative.) . . . During the second and third relapses there was extreme tenderness over body, especially right side in the region of the liver, so that patient could not stand sponge baths.

Specimens of this patient's blood obtained and sent to Laboratory of Army Medical School at Washington, D. C., March 25th, 1912. Major F. F. Russel reported April 1st, 1912, as follows: "Agglutination with micrococcus melitensis positive 1-160." (This eight months after height of the disease.)

Case III.

L. T. S., white, male, age 50, occupation engaged in goat raising near Wagoner, Arizona. Drank freely of goat's milk. Previous health good. Several weeks prior to May 25th, 1911, began with headache, malaise, constipated bowels. May 25th went to Phoenix and consulted a physician. Remained in Phoenix one month. After he returned home he continued very weak for one month. Profuse night sweats during the attack of fever. Neuralgic pains in right side of head. Swelling and tenderness of toes of both feet, followed by numbness and paralysis of toes of both feet, lasting up to date (March, 1911.)

March 4th, 1912, specimen of blood sent to the Laboratory of the Army Medical School at Washington, D. C., Major F. F. Russel reporting "Agglutination test with micrococcus melitensis 1-40."

Case IV.

S. W. H., white, male, age 40, husband of Case No. II. Engaged in goat industry near Wagoner, Arizona; previous health good. Used goat's milk on cereals and worked with the goats.

About May 25th had severe pain in right side of face and attributed it to bad teeth. Came to Prescott to consult dentist, who extracted several teeth without relieving condition. Returned home. Neuralgia continued in right side, accompanied by malaise, fever, headache, constipation and profuse perspiration. Returned to Prescott June 1st, sent to hospital. Temperature ranged from 99 degrees to 102

degrees F. for ten days. During the time severe neuralgic pain in right side of head, chilliness and profuse sweats at night. Rheumatic pains and swelling of right knee. Remained in hospital until June 15th. Returned home feeling weak and languid, and still suffering from neuralgic pain in different parts of the body. Returned to Prescott with a fever June 25th. Temperature 101.5 degrees and neuralgic pains and profuse perspiration. Fever lasted only a few days.

Specimen of blood forwarded to Laboratory of the Army Medical School at Washington, D. C., April 30th. Major F. F. Russel reporting May 11th, 1912, "Positive agglutination in a maximum dilution of 1-in 160, with the micrococcus melitensis." (This ten months after height of the disease.)

Case V.

V. S., white, female, age 18, daughter of L. T. S. of Case III. Drank goat's milk and assisted her father in attending the goats. Previous health good. Was taken sick about July 1st, complaining of malaise, headache, constipated bowels, pains all over body and fever. Consulted Dr. R. N. L. about July 10th. Returned home same day. Temperature 103 degrees. Seemed very stupid with slow pulse. Her mother stated that duration of illness was one month with one relapse. Severe pain in right hip and leg lasting for several months.

(Patient refused to allow specimen of blood to be taken for examination.)

Practically all of the Arizona goats are either Angora or maltese, their progenitors having been purchased from other goat raising sections of the United States or imported.

Ferenbaugh and Gentry found 34.7 per cent. of the goats they examined at Langtry, Texas, gave the agglutination test with the micrococcus meliten-

sis. Mohler and Eichhorn (5) report from the United States Bureau of Animal Industry that in 1905 the Department of Agriculture imported goats from the Island of Malta, intending them as foundation stock for a milch goat industry in this country. Many of these goats were found to be infected with the micrococcus melitensis and as a result of the discovery, not only the imported goats, but also their offspring were ordered destroyed.

From the foregoing facts we may conclude that the Arizona goats will furnish a rich field to the scientific investigators of Malta fever, and that other cases of this fever may be ex-

pected among those engaged in the goat industry in Arizona and we may add in the other States similarly interested.

We desire, at this time, to thank Major F. F. Russel, Medical Corps, U. S. A., for his advice and kindly assistance rendered in the laboratory study of our cases, also Dr. Hugh A. Brown of Washington, D. C., for valuable data furnished.

- 1—International Clinic, 1905-89.
- 2—J. A. M. A., August 26, 1911-730.
- 3—J. A. M. A., Sept. 9, 1911-889.
- 4—J. A. M. A., Sept. 23, 1911-1045.
- 5—J. A. M. A., April 13, 1912-1107.

PRACTICE IN MEXICO.

BY J. V. GAFF, M.D., LOS ANGELES, CALIFORNIA.

Physicians from the United States wishing to practice medicine and surgery in the Republic of Mexico may be admitted to practice in two ways. By examination and by verification of diploma.

If the applicant wishes to take the examination he makes it known to the secretary of the "Board of Medical Examiners" who notifies each member and on a certain day generally set for the purpose the candidate presents to the board a written Thesis of a certain number of pages and on certain subjects. The examination requires from two to three days, written and oral, theoretical, clinical and practical. The candidate is required to visit the hospital to examine clinical cases. If the candidate is successful the title of "Academic Physician" is conferred upon him and he enjoys full fellowship and the same privileges as graduates from Mexican colleges and is legally entitled to practice in any part of the Republic.

If the applicant for permission to practice does not wish to take the examination, he can be admitted to practice in the majority of the states by having his diploma verified which is done in the following manner:

First he procures a typewritten copy of the charter of the college from which he is a graduate. Then the Secretary of State in which the college is located certifies with his signature and the seal of the state that it is a correct copy of the charter. The signature of the secretary of this state is verified by the Secretary of State of the United States, then in turn by the Mexican Ambassador at Washington, D. C., and then by the minister of external relations in Mexico City.

Then the dean of the college attaches a paper with the photograph and description of the graduate and an affidavit certifying that the attached is a true description and photograph of the person named in the diploma presented. The document is now ready and when the applicant chooses the

field where he wishes to locate, he presents this accompanied by his diploma and a written application to the "Board of Health" (or consejo Superior de Salubridad) and if passed satisfactorily by them he is then given a certificate to that effect. This he carries to the Jefe Politics who gives him a written permission to exercise his profession as a physician without official title.

He then presents himself to the tax collector with another notice stating that he has opened an office in the place and is ready for business and asks that a quote shall be made out stating the amount that he will have to pay each month as professional tax; that complied with he is ready for business, but should any of these be neglected it might cause him a great deal of trouble, and perhaps a term in jail and a large fine.

In the Federal District the only foreign diplomas recognized are those from Spanish institutions; any physician can practice there, the only requirement is to make application to the collector of taxes who makes an estimate of your probable business generally about \$6.00 per month. Any foreign physician can practice there unless he is unfortunate enough to lose a patient and then he must obtain the signature of some friendly doctor, who bears the title of academic physician, to the death certificate, otherwise some interested person may ask for an investigation as to the cause of death asking what medicines were prescribed with a lot of other trouble thrown in for good measure, which might possibly include a term of imprisonment or fine, or both.

There are many well educated physicians in Mexico, courteous, polite and genial gentlemen. There are many who have graduated from medical institutions in France, Germany, England

and the United States. The largest number who are graduates from foreign colleges have received their degrees from Paris, France, or Philadelphia, Pa., U. S. A.

There are seven medical colleges in the Republic, six Regular and one Homeopathic. The last named and the National Medical College are located in Mexico City the Capitol of the nation. Each county seat and city of any size has a board of health which reports to the board of health at the capital of the state and it in turn is subject to the supreme board of health of the nation in Mexico City.

Dr. Liciega has held the office as president of the supreme board of health for a good many years and has, with his little army of assistants, done many great things for Mexico along these lines. He has made a noble fight against yellow fever and with such good effect that whereas a few years ago the Atlantic ports of Mexico were scarcely ever free from it, now there are seldom any cases except those that are brought in from the outside.

They have a very vigilant little sanitary army—hard workers and constantly on the alert.

Not long ago the writer had occasion to stop over a few days in the City of Veracruz and not being accustomed to the intense heat and the little cage of mosquito netting around the bed, sleep was not very restful in the fore part of the night and at 8 o'clock in the morning he still was found sleeping. He was aroused by a knocking at the door and informed that the sanitary officer would like to talk with him.

I learned that it was the custom to visit all of the hotels and lodging houses, and everywhere that transient people might be found, every morning, and if one is not out of his room at that hour there is a suspicion that he may be sick, consequently there is

opportunity for questioning and if necessary a thorough examination to find out if he is suffering from any contagious disease.

I was invited to accompany him on his rounds and found things done in an up-to-date and efficient manner.

I was told that a few years ago that the cities of Veracruz and Merida were very dangerous places for a stranger to pass even one night. Today a great transformation has taken place in both cities; all the streets have modern asphalt pavements with all the modern wheeled vehicles, electric lights, electric cars and all and every modern improvement that you will find in any other cities of their size.

In the suburbs every pool of water and every patch of marsh and dirty

grass is regularly sprayed with coal oil. All cans bottles and trash are removed at once or a heavy fine is the penalty.

Tampico, Couthacualcis, Frontera, Campeche, Progreso and Merida, once the home of Bubonic plague, yellow fever, and a host of other dangerous and contagious diseases, places to be wisely avoided by foreigners and only entered from dire necessity, are now visited by tourists for pleasure and are considered as healthy as any other tropical seaport.

Veracruz and Merida are today both beautiful cities and if it were not for the tropical heat they might be considered delightful and safe places to live.

3420 University Ave.

POSTURE AND NEUROSIS.

BY DR. CECIL E. REYNOLDS, LOS ANGELES, LATE SCHOOL DOCTOR TO THE LONDON COUNTY COUNCIL, ETC.

That we are not yet adapted to the upright posture is evident when we consider the part that posture plays in varicocele, enteroptosis, splanchnic vasoparesis, haemorrhoids, etc. But is not universally appreciated that the dorsal recumbent and semi-recumbent postures in bipeds accentuate the ill effects of the upright posture and give rise to a train of symptoms in certain individuals, especially in the neurasthenic.

If we compare our mode of life in respect of posture alone with our nearest relatives, the anthropoid apes, the contrast is very striking. The ape spends the greater part of the day with the abdomen directed towards the ground. When on earth, he walks sometimes nearly upright, but frequently drops down onto his hands. When he sits, the ventral aspect of the body is inclined downwards and forwards; and when he sleeps, the atti-

tude of selection is such that he lies on one or other breast. Probably the right shoulder is the one he lies on most often, but I have not made sufficient observations to determine this. Man, on the other hand, walks as nearly vertical as possible; he stands painfully for prolonged periods in this attitude. When tired, he falls into a rocking-chair, which places him in such a position that his abdomen faces the sky, and when he sleeps he not infrequently sleeps on his back.

Now it is not in the scope of this paper to enter into a discussion on the effect of posture on the vascular system and its compensatory mechanisms, but from a purely mechanical point of view, it is undeniable that our semilunar ganglia and indeed also the intrathoracic sympathetic ganglia are subjected to more constant pressure and annoyance than are the same ganglia of our Simian relatives.

Now this might appear to be hardly worth while pointing out were it not that I have met with several cases in which an unusual and distressing complaint only occurred when the patient was lying on the back. In one case only was there valvular disease of the heart. The main complaint, the details of which varied in the several cases, was that the patient awoke from sleep after confused dreaming and was unable to stir hand, foot or eyelid. Accompanying this, was a sense of impending death, and a desire for aid to re-establish motion. After what seems an eternity, motion returns quite suddenly and they spring up in terror. This is clearly a condition of functional dissociation of the cerebral centers. The intellectual centers awaken under the influence of a peripheral irritation from the solar plexus, and the justly fatigued motor centers fail immediately to respond to impulses from the higher centers. Even in dreaming a dissociation occurs and the ideas are not accompanied by their appropriate movements. The exaggeration on the other side is seen in somnambulists, in whom there is pathological association of centers (in terms of the physiology of sleep) as opposed to the cases I am now describing in whom there is a pathological dissociation of centers. Most of my patients have been women, but I have heard the same complaint from nervous men of great bodily activity. The symptom has never, in my experience, manifested itself when the patient was in other than the dorsirecumbent posture, and a full stomach can usually be taken for granted. This complaint, although so closely allied to a "night-mare" is not by any means the same. There is no doubt whatever that intellectually these patients are wide awake; the description of the sensation of being bound in ice, and the effort to restore animation, even to calculating how long a time may prob-

ably elapse before someone comes to their aid, is too vivid for a dream. During the period of motor incapability these patients are aware of their environment, realize they are in bed, appreciate the position of doors, windows, etc., and their consciousness is capable of logical sequence of thought. The night terrors and screaming fits of children, although greatly influenced by the presence of nasal adenoids, generally occur when the child is sleeping on its back. The effect of sleeping on the back in producing involuntary erotism is well known to intelligent laymen, and it is not uncommon for athletes when training to attach a bag of stones to the waist so that they are awakened by discomfort if they happen to roll over onto the back, thus avoiding pressure by the bladder upon the vesiculae seminales, and their plexuses.

These observations are, I think, sufficient to call attention to the advisability of adding to the schedule of school hygiene a paragraph on the natural position for sleep.

In endeavoring to correct the ill effects of our rapid evolution, much is to be learned by studying the natural mode of life of the anthropoid apes in the wild state, in the same way that the observations that these apes suffered terribly from tuberculosis when kept in confinement, was a strong argument in favor of the present day fresh-air movement. Since the establishment of outdoor cages for the apes in the London zoological gardens, the mortality from phthisis immediately fell in a most startling way.

The natural position in which to lie is on the front of one or other shoulder, preferably the right, because the heart is not hampered thereby in its action and the heart sounds are not so clearly conducted to the sleeper's ear. From the point of view of the stomach, it is very significant that ulcers are more frequent on the posterior wall than on

the anterior in the proportion of 255 to 69 according to one authority. I have also known a case of chronic pylorospasm in which decided benefit accrued when the patient slept on his ventral aspect.

The distressed sleep which results in many people who doze off in an arm chair is a matter of common observations. I have frequently watched persons under these conditions. The dropped jaw, the inarticulate sounds, the half opened eyes, showing the sclerotics, the labored breathing and twitching fingers are not at all suggestive of natural sleep; and I remember one lady who used frequently when sleeping in an arm chair to become cataleptically rigid with eyes wide open, uttering inarticulate sounds, and thus presenting such a picture of distress that her relatives would hasten and waken her. She also used to complain occasionally of being intellectually awake and physically unable to move when in bed on the back. These cases are generally diagnosed as neurasthenics, which they certainly are, and attention may or may not be called to a gastric trouble, but the object of this paper is to call attention to the fact that this particular sensation caused by functional dissociation always occurs in the dorsi-recumbent position as far as my experience goes, and the predisposing factors may be summarized as follows:

1. Physical fatigue prior to sleep.
2. Mental excitability prior to sleep.
3. Full stomach.
4. Dorsi-recumbent or semi-recumbent posture, (possibly essential).

These factors may only produce dreaming, or the irritation to the intellectual centers may render them sufficiently active to become cognizant of their true surroundings and capable of logical thought while the motor centers are still profoundly inactive.

This observation leads me to believe that anaemia of the brain is only one of the factors in the production of sleep and that some process of the nature of retraction of the dendrites is highly probable and that the impulse which causes awakening spreads like a wave from center to center in the brain, and this wave under normal conditions is so rapid as to make it appear that the functions of the brain are simultaneously restored.

In case anyone reading this accuses me of suggesting that neurasthenics and the like would be benefited by a course of treatment "on all fours" I would point out that as far as my memory serves me a superstitious gentleman named Nebuchadnezzar, after "seeing things" was greatly benefited by being turned out to grass.

1100-1 Title Insurance Bldg.

Los Angeles.

OESOPHAGOSCOPY FOR REMOVAL OF FOREIGN BODIES.

BY W. P. MILLSPAUGH, M.D., LOS ANGELES.

It is with considerable hesitation that I present this subject, for two reasons. In the first place, it is a subject which seems, naturally to belong to the surgeon or the laryngologist. In the second place, the presentation may seem premature on account of the

shortness of my series of cases. I feel fully justified, however, in bringing it before you at this time, because, so far as my knowledge extends, no surgeon or laryngologist in Southern California has presented the subject, and because it is a subject of great impor-

tance, at least to the patient who has been unfortunate enough to swallow a foreign body.

I hold in my hand an instrument which has an honorable history, but which I think should be relegated to the museum of antiquities. You recognize it as the probang. I venture the opinion that to a large proportion of you in this audience, in the emergency of having a patient come in with a foreign body lodged in the oesophagus, the first thought would have been to use this instrument, or to give a large bolus of food to carry the body down, or to force vomiting in the hope of bringing the body up. Now, will you put yourself for a moment in the patient's place? If you had swallowed a piece of sharp-pointed bone or a fragment of tooth-plate or some other irregular object, would you like to have this instrument rammed blindly down your throat, opened up, and pulled out, with the hope of bringing the foreign body with it? Or would you rather have this other instrument, perfectly smooth though rigid, passed carefully down by touch and vision to the level of the object, and the effort then made to remove it by forceps? I suppose the answer is easy enough—it depends upon who is at the other end of the instrument! In this connection our minds turn naturally to the great pioneer in this work in America, Dr. Chevalier Jackson. Happy, indeed, is the patient who can appeal to his skill for relief. Unfortunately, Pittsburg is far away, and time is precious in these cases. But Jackson himself and many others have shown that the difficulties attendant upon this work are overcome by patient practice and that the technique is not too difficult for the average man; and I will say that I had used the oesophagoscope successfully in a considerable number of cases before I

ever saw it introduced by another person.

As to methods. The first points to be decided are the position of the patient and whether general or local anesthesia shall be used. If the patient be an adult and the foreign body fairly smooth, local anesthesia may be employed, but I believe general anesthesia will be more satisfactory in the majority of foreign body cases, unless there is some contra-indication. Ether is the anesthetic of choice. If the dangers of rectal anesthesia could be overcome this method would be ideal; and until we reach this point, some of the methods of giving warm ether vapor through nasal or mouth tubes would be advantageous. But ordinary anesthesia is reasonably satisfactory; if the patient is put well under before introduction is attempted little difficulty with the anesthetic is usually encountered. General anesthesia necessitates the recumbent position. The patient lies supine, with his shoulders four to six inches beyond the end of the table, his head being supported by an assistant seated at the patient's right. As the result of his extensive experience Jackson recommends the Boyce position for the assistant, that is, he sits on a rather low stool with his right knee on the floor; his left foot rests on a very low stool and his left knee supports his left elbow and forearm, while his left hand supports and steadies the patient's head. The assistant's right arm passes under the patient's neck and his right hand controls the mouth-gag or bite-block in the left side of the patient's mouth. It has been my fortune to have a different assistant each time, and I have not succeeded in training any one of them to use the Boyce position, each preferring his own method. This has increased my difficulties but has not been found to be a serious drawback.

A Ferguson mouth-gag may be used, but Jackson in his later writings gives preference to a bite-block or steel thimble on a finger of the assistant's right hand. I have several times used a 3-inch muslin roller bandage partly unrolled as a bite-block.

The assistant extends the patient's head forcibly, getting as much of the extension as possible in the atlanto-occipital joint. The operator, standing directly above the patient's head, inserts his left index finger as far as possible toward the patient's oesophagus. In a child he may reach the cricoid, but not in the adult. The oesophagoscope, lubricated with glycerine or vaseline, and with the obturator in position is introduced carefully, its tip passing along the finger to the right pyriform sinus. Lifting the larynx as much as possible (directly in a child) with his left forefinger, and the assistant securing almost full extension of the head, the operator endeavors to pass, without force, what is usually the chief obstacle to introduction, the prominent convexity of the bodies of the cervical vertebrae opposite the cricoid cartilage. Sometimes this is surprisingly easy. Usually it is rather difficult, but by keeping to the side in the pyriform sinus and by having the assistant vary the extension slightly, the tip of the instrument may be slipped past the obstacle and into the oesophagus. The obturator should now be withdrawn at once, the light turned on, and the remainder of the introduction accomplished by vision. This is now comparatively simple, the assistant varying the degree of extension slightly from time to time to prevent the tip of the tube from being pressed by leverage too strongly against one side of the oesophagus. Mucus will at times obscure the field and must be swabbed away; if it is abundant or fluids regurgitating from the stomach are

troublesome, the suction tube in the side of the oesophagoscope may be connected with proper suction apparatus and will materially help.

Proceeding carefully, the operator explores every inch of the oesophagus, searching for the foreign body. With good illumination it is usually easy to recognize the latter; the next problem is to grasp and remove it.

The first case in which I had an opportunity to remove a foreign body from the oesophagus was that of an insane woman who had swallowed a silver-plated table knife nine inches long (here is the knife). The knife stood in the oesophagus with the end of the blade just above the cardia. It seems hardly credible, but I confess with shame that I passed my instrument through the oesophagus to the stomach and did not once recognize the knife! It was presently removed by Dr. Alden through a gastrotomy wound. In mitigation of my failure I want to say that this was my first case and that I had no instrument but Jackson's 80-centimeter gastroscope, a tube twice as long as this one.

The next foreign body case was a woman who prior to an abdominal operation denied having any false teeth. When she came out of ether a plate holding the two upper median incisors was missing and the woman complained of dysphagia. She was able however to swallow fluids and got along so well that even after four weeks there was some doubt as to the location of the teeth, the patient being a person of very limited intelligence. She persisted however in her complaint of dysphagia, and oesophagoscopy was decided upon. Using Jackson's 53-centimeter oesophagoscope, and having become more familiar with the task, I had little difficulty in reaching and recognizing the teeth, which were firmly lodged in the gullet about two or three inches

below the cricoid, a flat surface of the plate presenting. Failing, after repeated efforts, to secure a hold on the plate, I handed over the forceps to Dr. Richardson, who also worked for some time without success. Finally, however, by manipulating with one of the hooked instruments, Dr. Richardson got an edge of the plate in view and seized it with the forceps. Tube and forceps were now carefully drawn upward. After moving the body about one inch the forceps slipped off. The tube was re-introduced, Dr. Richardson secured a fresh hold, and tube, forceps and plate were withdrawn together. This is a photograph of the plate, which measured one by one and one-eighth inches. A corner of the plate had been broken, leaving a somewhat sharp point. As it had lain there for four weeks it was well embedded and there was naturally some traumatism in removing it. But the patient recovered promptly without further trouble.

Case No. 3 was a boy about 18 who had swallowed a peach stone and felt that it was lodged in the upper part of the oesophagus. This is the only case in which I can recall any difficulty in introducing the tube after the cricoid had been passed, but I failed repeatedly in getting more than a couple of inches below this point and finally called Dr. McCoy, who readily passed the obstacle. In this case there seemed to be an exaggeration of the normal anteroposterior bend of the oesophagus, which was overcome by flexing the patient's neck somewhat. The oesophagus was explored and showed some traumatism, but no stone was to be found. The patient had now been under ether a considerable length of time and it was decided not to explore the stomach. This procedure, however, would have been entirely proper. A

good-sized peach stone with its sharp point might easily cause trouble in its passage of the intestines. I believe, however, that the boy had no further trouble.

The next case was a very easy one. A boy about 6 years old had got a quarter stuck in his oesophagus. The X-Ray showed its location a short distance below the cricoid. Under ether, a short tracheoscope was introduced and the edge of the quarter, brightly illuminated, was found presenting in the lumen of the oesophagus. It was a perfectly simple matter to grasp it with the forceps and withdraw tube and forceps together. The quarter slipped from the bite of the forceps after leaving the oesophagus and lodged behind the soft palate. The effort to rescue it from this position and prevent its being re-swallowed presented more difficulty than any other part of this operation.

The next patient was a man who had swallowed a fragment of chicken bone and felt that it was still lodged in the oesophagus, after 12 hours or more. Exploration of the entire oesophagus under local anesthesia failed to reveal the foreign body. The patient had no further difficulty.

The last case was a man about 45, the owner of this upper plate. The plate broke while he was eating and this smaller fragment got a good start down the gullet. The X-Ray plate showed it to be opposite the upper dorsal vertebrae. This short Jackson oesophagoscope, which I have had made especially for such cases, was introduced with little difficulty. The shortness of the tube makes manipulation through it with instruments much easier. A moderate amount of manoeuvring brought an edge of the plate into view. A good grip with the forceps was secured, and forceps, tube and plate were carefully with-

drawn. You see how sharp the edge of the plate is, and there was some slight bleeding during the manipulation, but as in the other cases, no trouble resulted.

These patients are advised to remain under observation for forty-eight hours or more, during which time the diet should be largely fluid. Antiseptic mouth washes should be used freely, and the temperature watched in order that mediastinal infection may be promptly recognized. In cases where there has been considerable traumatism, I believe it would be proper treatment to pass the oesophagoscope daily, by direct vision, and with great care of course, and apply solutions of argyrol or other antiseptic

directly to the injured surface.

As to instruments. I have never used the Bruening oesophagoscope, but I think that for this foreign-body work the Jackson instrument has some distinct advantages. The eye may be applied close to the tube, thus saving a couple of inches of distance as compared with the other instrument; the light is at the distal end of the tube just where the foreign body is, so it is not obscured by the forceps or other instrument being used through the tube; and there is no reflector or other apparatus at the proximal end of the tube to interfere with manipulation of the forceps, etc., by direct vision.

429 Laughlin Bldg.

THE NURSE AS A CITIZEN.*

BY MRS. SEWARD A. SIMONS, SOUTH PASADENA, CAL.

It gives me genuine pleasure to have an opportunity to speak to you tonight. I say this in no perfunctory way, for I am always interested in women and their progress, and it is a real gratification to know that a body of trained women is to be added to the workers of this community. I am glad to have the chance to congratulate you and bid you God-speed on the next phase of your work. More than this, I am pleased to be able to say how good I know your training is. Please pardon me for being personal.

Five years ago I was a patient at the California Hospital; when I left it, I took a graduate of your training school home with me, and she was with me for nearly three months. For five years previous I had been constantly in hospitals in the East and in the care of nurses. Since that time, so effective was the care I received from

the graduate of the California Hospital Training School, that I have never had a nurse since.

Now, this may not appeal to you as a business proposition; but as a test of efficiency I can think of no better indorsement.

You have completed three years of very hard work, and you are here tonight to receive the certificate which gives you credit for having fulfilled the requirements of a rigorous course of training, and which entitles you to take up the work of a professional nurse. That you have been faithful, industrious and conscientious, your being here tonight testifies. That your work has been hard, anyone who is at all familiar with hospitals and the care of the sick knows full well. You have learned by actual experience that you have a vocation which by its nature demands hard work, and probably

*Address delivered at the Fourteenth Annual Commencement of the California Hospital Training School for Nurses, Los Angeles, May 23rd, 1912.

sometimes it has seemed too hard, and you have wished that your lot in life had been something easier. I want to say one word about the value of hard work. It is our daily task, whatever it is, that mainly educates us—we may all have ideals of what we would like to do or be—dreams of success and greatness as artists, poets, writers and perhaps even as statesmen, but without the hard work of daily life, no matter what our work may be, we can never develop the fundamentals of all greatness, all success.

Do you think the great and famous escape drudgery? A certain amount of native power and temperament counts for much, but we ordinary minds are convinced of error if we think for a moment that any attain real success without every day plodding away at hard work. Listen to some of their testimony:

“Genius is patience,” said Sir Isaac Newton.

“The Prime Minister’s secret is patience,” said Sir William Pitt, the great Prime Minister of England.

“My imagination would never have served me as it has, but for the habit of commonplace, humble, patient, daily, toiling drudging attention,” said Charles Dickens.

The question of importance is not—How much talent have I?—but how much will to use the talent that I have—not, How much do I know?—but how much do I do with what I know?

Then let us sing a hallelujah in praise for hard work; nothing is accomplished in this world without it. And let me hope that in addition to this lesson you have also learned the satisfaction of work as you are doing it. The vision of the goal is inspiring, but steady fulfillment of hourly condition bring their own inspiration, their own compensation—if we can

only bring our minds to see that in solving these seemingly ignoble and common problems we are constantly gaining strength and developing character and efficiency.

The Bishop of Exeter said, “Of all work that produces results, nine-tenths must be drudgery”—and there must be no “blue-rose melancholy,” that thinks, if only conditions were altogether otherwise—if only roses could be blue. We are called to face the exact circumstances in which we are, and faithfully to fulfill the conditions there demanded. This is the meaning of the remarkable stanza of Edward Rowland Sill, called “Life:”

“Forenoon and afternoon and night—
Forenoon and afternoon and night—
Forenoon and—what!

The empty song repeats itself. No more?

Yea, that is Life! Make this forenoon sublime;

This afternoon a psalm, this night a prayer;

And time is conquered, and thy crown is won.”

I have spoken to you thus about hard work, because I realize that for some of you the hardest work in your nursing careers is yet to come. In your school training you have worked under direction, as parts of a well-oiled machine of which you were the cogs. You have had the inspiration of community interests, of competition, and all that goes to make up the esprit de corps of any body of students. You will find now that you miss having authority back of you; you will miss the order and regularity of your hospital life and work; that now you are placed upon your own responsibility, you must take initiative; you must meet quite other and different conditions. You will often wish yourself back in your training school days, but the qualities that you devel-

oped in the hospital will stand you in good stead in this larger field—and I hope you will begin to realize the truth of what I have tried to show you, that we can only prepare for the large things of life by hard work in doing the small ones.

You are now both nurse and woman; it will forever be impossible to differentiate where one begins and the other ends—as long as you continue a nurse, just so long will your training continue. There will always be something new for you to learn, some way better than that you now know to do things. Your training as a woman will never cease until the day of your death, and even after that we cannot but believe that development progresses. You have always the possibility of making a fine woman. When someone spoke to an old minister about growing old, he said: "So long as you keep on growing, it's of no consequence how old you are." Let us all remember *that*, and what Queen Victoria said when in her *seventieth* year she took up the study of Hindustani: "I mean to live every day as if I were immortal."

Now as women in California, we have had the field of our interests and activities enlarged during the past year by being granted the right to vote—already the women have justified their enfranchisement by the conscientious way in which they have registered and voted at the different municipal elections throughout the State. There are subjects which are now being considered as legitimate questions of government, with which your training has made you familiar, and about certain phases of them you can give information as experts.

If you go about the community in the duties of your profession, you can carry a message of education which will serve to create an enlightened

public opinion on matters of pure food, public health, public sanitation, the care of little children, the prevention of disease, and the prevention of crime.

In fact, if you are alive to your opportunities and duties as citizens, you can do much to promote activity in those lines of endeavor that have always been women's interests; and now that we women in California have a legitimate right to express our opinion about public matters, we should feel it our patriotic duty to aid in establishing and maturing active humanitarian measures for the welfare of our state and nation.

Politics is a word that has been so degraded by evil association, that it takes courage to say we are interested in politics; and the term, politician, is a reproach. There are many evidences that politics are to be restored to the original dignity and meaning of the word,—an interest in matters of government—and with the increasing spirit of democracy in this country, of which the woman suffrage movement is a symptom and a result, there is evidence that politics is going to be more and more one of the interests of a free people. With our newer ideals of peace, we appreciate that he is not alone a patriot who bears arms in time of war in defense of his country. We know that serious problems confront state and nation every day that need careful consideration and attention from all large-minded and patriotic citizens. Each of us has some contribution to make to the political opinion of our community, and we should feel it a debt laid upon us, a responsibility which is a pleasure as well as a duty to fulfill.

You as nurses have a unique opportunity, for it carries much greater weight to have a nurse insist that pure milk which is safe-guarded by every

proper precaution, is necessary for the health of little children, and that the city and state must take the necessary steps to enforce those precautions, than for a woman of no special training to talk about what some ignorant or uninformed persons term a fad.

Here in Los Angeles is now going on a campaign for tuberculin tested cattle, a measure opposed by the milk dealers, though endorsed by the United States Bureau of Agriculture. It is unenlightenment allied with business interests which defeats such measures.

We have certain state laws which are very important as bearing on matters of public health; one in the interest of pure food is, that all food which is displayed for sale should be protected from dust and flies. Think of the butcher shops in this city. Do you know one in which provisions of that statute are absolutely complied with? Do you know of a grocery or a bakery where no food is exposed to dust and flies? It is very spectacular to get the legislature to pass laws, but what is the use of them if they are not enforced? It is just this logical consequence of legislation which I think is going to make a strong appeal to women. If good laws are made, we must create an enlightened public opinion that insists on their enforcement. We must make it our business to see that women are informed about these laws and that they refuse to patronize dealers who do not comply with their conditions.

Another state law relating to health is the one that makes tuberculosis and all venereal disease reportable to the local health officer and the state board of health. About one-tenth of the cases of tuberculosis are reported in Los Angeles, and not any in Pasadena, according to the health officers of those cities. The reasons back of the law are good ones; these diseases are

classed with other diseases; and if any effective work is to be done to prevent their spread, it is essential for the health officer to know where every source of infection is, and to take proper measures for protecting the general public from further menace.

Physicians do not report these diseases or several reasons; their first one is that patients do not like it. Now, these reports are absolutely safeguarded from publicity; and there is no reason for anyone but the physician, the patient and the health officer to know that such a report is made.

The same is the case with venereal diseases, which are never reported, and which never will be until an enlightened public demands protection from all contagious diseases; and insists that preventable diseases shall be prevented.

We are beginning to be less prudish, and for that reason more truly modest in our consideration of questions of social hygiene. Thoughtful persons realize that the policy of mystery and the attempt to ignore the existence of the cancer, which is eating at the heart of our civilization, is ruinous to any movement for betterment.

You as nurses know how the sins of unchastity are visited on the children unto the third and fourth generation; how the ignorant suffer with the guilty; and how imperative it is that there should be as full an understanding of the contagion and character of these diseases as there is of diphtheria or scarlet fever. The public needs the kind of expert testimony that nurses can give.

This question is of a piece with that of the hideous commerce of prostitution. Intelligent, educated women can render no greater service to their state and their unfortunate sisters, the so-called "fallen-women," than by an effort to change the popular attitude

towards that evil—as a social disease that can not be cured. Let us understand that prostitution and the white slave traffic are beyond consideration merely as a moral question—it is a great economic and commercial consideration and as such needs regulation by law, with the ultimate aim of elimination.

Let us fully understand that of the large number of women in this business 80 per cent. are unwillingly victims of a system that is without parallel in its insidious methods of betrayal, that many of the girls are entrapped in moments of weakness due to lack of a living wage, proper food, proper recreation; that many of them lost their chastity when they were piteously young, betrayed by members of their own households in that crowding and lack of privacy which life in tenements necessitates.

In our “holier than thou” attitude we have considered this the unpardonable sin in women—a man may err and be unchaste and society condones and forgives him; but you all know the hardness of heart of the average good citizen towards the “fallen woman.” Women, kindly towards all other human creatures, become at once hard and hostile in their attitude towards the young girls, who in evil houses are literally beaten and starved by the dissolute men, who exploit them.

If kind-hearted women were informed about these conditions, they could not endure it; but they have been taught that virtue and modesty on their part mean ignorance. We women must feel the burden and responsibility of the degradation of these, our sisters. All womanhood is lowered because of this condition.

If we are going to rise in the moral and spiritual scale, we must do our utmost to make it forever impossible that these wretched women continue

longer the victims of a commerce and capital.

Can you not see how this question involves all those vital municipal questions of proper housing conditions for the poor, a living wage for all workers, decent places of amusement, entirely separated from saloons, supervised playgrounds and dance halls? All these are necessary for the safe-guarding and protection of the young. They are all questions that bear directly on the prevention of disease and vice and crime. We women must help in the solution of these problems.

All this equally and directly applies to the conservation of children. We have now at Washington a Children’s Bureau, with that splendid woman, Miss Julia Lathrop, at its head. The bureau, generally speaking, is to make investigations into the welfare of children. We shall find out perhaps why one out of every four babies in the United States dies before it is a year old, how many children from four to fourteen go to work and work for more than eight hours a day, how many children never have enough to eat, and how many die of overwork and under-feeding.

But when we get all these facts, as practical American women we are going to want to do something about it all. We shall not be willing to let the Children’s Bureau stand merely for investigation.

We must do effective work for child labor legislation, and we must feel as women that one of the most feminine of interests is the care and protection of little children. That we are only truly womanly when our hearts overflow with love for all the children of the world. No program of conservation of natural resources is complete that does not include the care of children, the future citizens of the nation.

It is only possible for me to offer a

few suggestions to you as to ways of usefulness in the expression of your loyalty as citizens—wherever your interests lead you, if you are alert and alive to meet the situation, avenues of opportunity ever broader and wider will constantly appear.

You are entering upon a vocation which has traditionally been conceded to belong to woman's sphere. It has always been considered part of women's duty to care for other people. Your profession, from the qualities and virtues which it demands, has the sacredness of a calling. It is a pleasure to reflect how little that is mean or undignified has ever been associated with the nursing profession. Its standards are of the highest, both morally and spiritually.

The names of great women have added luster to its reputation, and in all times the title of nurse suggests all that is most typically womanly. It is appropriate and fitting in the movements for progress and the uplift of the race that you in this very feminine pursuit should take an active part, that with a pure heart and a clear brain you may translate your special expert knowledge into many inspiring, guiding forces which shall answer the varied social needs and that, loyal to the communities in which you live, you may stand faithfully for purity of the individual life, for patient following of the pointing finger of duty—for a broad and patriotic citizenship that will vindicate the existence of our republic among all the nations of the world.

TUBERCLES OF THE CHOROID.

G. C. ARMSTRONG, M.D., LOS ANGELES.

A young man of 19 years of age was admitted to the hospital complaining of blindness in the right eye. He was of Russian parentage. Had lost some of his immediate family due to tuberculosis. He himself had never been robust, and was hardly able to complete a day's work without almost complete physical exhaustion. His physique was much below the average, had poor appetite, sallow complexion and was constipated. He had morning cough with some expectoration for several months with pleuritic pains in the right side at times. Pulse was rapid and he had an afternoon temperature of over 100 F every day. Sputum examination showed the tubercle bacillus after sedimentation.

Physical examination showed marked retraction of both infra clavicular spaces with impaired resonance, and fine moist rales on the right side. Coarse

rales were heard on the back, near the post axillary line, at about 6th and 7th ribs. Vision R. E. 3/200. L. E. 20/20.

The right iris was not clear like its fellow, but reacted to light and accommodation. The cornea was clear. The aqueous and lens were normal. The vitreous was somewhat hazy and the fundus was difficult to make out. Under atropine however, the details could be fairly made out and showed a number of small pale reddish nodules studded about the macula, and near the optic disk. The disk itself was indistinct with no distinct outline, but did not appear congested.

The nodules in the fundus were scattered irregularly over its surface, and the retinal vessels were seen in front, but were not especially changed in appearance. There was no pain in the eye at the time of entrance. Some time after admittance the patient de-

veloped an iritis due to a small nodule which grew on the iris towards its nasal side. The nodule appeared to be about the size of a small pin's head, raised and showed distinct inflammatory changes, with some clouding of the aqueous. The vision fell below counting of fingers. The cornea became somewhat hazy, and the tension remained normal. Von Pirquett gave a distinct positive reaction and the patient was given injections of tuberculin. Atropin was used for its effect on the pupil. The patient was under observation for a period of three months with some improvement of the iritis, but the vision

remained below counting fingers. No view of the fundus could be obtained after the development of the iritis.

The patient left the institution.

In commenting on the case, most text books speak of tuberculosis of the choroid as associated with tuberculous meningitis and miliary tuberculosis. Recently however a number of observers have noted the association of tubercle of the choroid with chronic pulmonary tuberculosis. It is probable that heretofore the condition has been overlooked and all the attention paid to the lung lesion.

502 Auditorium Building.

SALVARSAN.*

ABSTRACT OF A PAPER BY PROF. DR. PAUL EHRLICH.

In the course of the present year several hundred thousand patients have been treated with Salvarsan; that in all this number a few accidents should occur need give rise to no scruples about its use.

The ideal imagined by Ehrlich in regard to a great therapeutic sterilization from the remedy is bound up in the statement that a single injection is able to free the organism from germ life, and thereby to cure at once the disease thus caused. This has actually been accomplished in certain diseases, among others fowl and goose spirillosis.

In mankind this has been brought about in recurrent fever (all spirilli killed by a single injection in from 6 to 8 hours) as well as in frambesia, a syphilis like tropical disease, hitherto refractory to treatment. One case which stands alone in the history of medicine illustrates the enormous efficiency of Salvarsan in the most brilliant fashion. In a hospital at Surinam, 328 patients received injections of the drug during one week. Fourteen days

later the last patient was discharged cured and the hospital closed. In all 900 cases of frambesia were treated, with but three failures.

In tertian fever Salvarsan acts very favorably, especially when quinine fails, because the particular strain or parasite is quinine fast.

Bilharzia hematobium can likewise be killed by Salvarsan.

The aleppo boil, naturally a suppurative process which persists for a month, seems to be curable by one injection of Salvarsan. In kale-agar of children, an effect caused by a causation, Salvarsan is inert, from which fact we are justified in believing that the two causal agents must differ among themselves.

The chest disease of horses is curable by a single injection of Salvarsan (3 to 4 grams); neither pneumonia nor the much dreaded tendon thickenings develop (the latter highly important in reference to military service).

In African farey of animals and man (the latter rare) one injection is like-

*Abstract from the Munch. Med. Wochenschrift, 1911, Nos. 42 and 47, read at the Medical Section of the Meeting of German Physicians and Naturalists held in Karlsruhe, September 29, 1911.

wise sufficient for a cure. According to rabbit experiments in Dorpat the actual bacillus of farcy appears to be destroyed by the drug.

The most difficult to influence, unfortunately, are the trypanosome diseases, and among these also the sleeping sickness, in which despite four years assiduous labor Ehrlich could not attain favorable results.

Syphilis belongs to the group of diseases, less readily influenced by Salvarsan (in comparison with the group in which one injection is a certain cure.)

The best results in syphilis are seen in the early forms (primary lesion, roseola) in which it is curative in 90 per cent.; hence Salvarsan is applied here alone or in conjunction with mercury. The question of Salvarsan treatment will be settled by dermatology and internal medicine.

(The preceding, an abstract of the full paper of the Secretary of the Medical Society addressed was fully discussed) as follows:

W. Wechselmann, Berlin: Hereafter a consideration of syphilis therapy without Salvarsan is inconceivable. The disintoxication of the arsenic by combining it in the Salvarsan molecule is astonishing. In 8000 cases the speaker had not seen a single instance of poisoning. Hence he is not afraid to use it even in anemic, poorly nourished subjects. It is absolutely necessary, however, that the distilled water used be pure and fresh. The speaker had tested 7 samples of Salvarsan which had caused a violent reaction, and in his hands they were injected with no reaction whatever. Arsenic can not cause acute hemorrhagic encephalitis, a bacterial affection. Bushke claims that from its great affinity with nerve substance, Salvarsan is neurotoxic, but according to Ullman, there is no union of Salvarsan with brain substance. Hysterical accidents

may follow its use as a result of emotional disturbance—as in a case of peroneous paralysis following an injection in the shoulder.

Gennerich of Reil, stated that to assure accuracy of dosage and constancy of action the intravenous method should be used (see his own paper on Salvarsan).

Touton of Wiesbaden, to avoid violent reactions from Salvarsan it is best to destroy as many spirochetes as possible by a two weeks inunction cure with mercurial ointment.

Mierowski of Cologne, in 500 cases Salvarsan treatment of syphilis saw two instances of anaphylaxis. In 8 per cent. of cases he saw fever. In 1 case out of 390 he saw a nerve recurrence. In a primary lesion with Wassermann not yet developed one injection with added use of calomel ointment cut short the disease.

Weinstraub of Weisbaden, had seen numerous cures of vascular and cardiac lesions in later syphilis and never any bad effects. Much care should be used in the dosage.

Edmond Thery, the French economist, figures that the maintenance of Europe's armed peace footing in the last twenty-five years cost one hundred and fifty billion francs, approximately \$29,000,000,000, which involved an increase in the public debt of the European states of from one hundred and five to one hundred and fifty-one billion francs, and constantly excluded from productive industry 195,000 officers and 3,800,000 men. We have not the figures at hand to show the cost of Uncle Sam's peaceful campaign, but it is on the same startling scale, and we are indeed trying to surpass any other nation, and every other nation is trying not to be surpassed by us. The results of this peaceful competition is not only as burdensome as real war, but it is sublimely ridiculous.

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EDITORIAL

MILK FROM SICK COWS.

The tuberculin ordinance has been defeated in Los Angeles. This is such a sad commentary on the intelligence and esthetics of the voters that we forbear making further remarks at this time, hoping that a fuller exercise of the ballot will demonstrate with a larger vote that this community is worth the respect of the nation. We don't believe Los Angeles will be satisfied with a milk supply derived largely from sick cows.

PANAMA CANAL.

We have just returned from a few days visit to the great Canal on the Isthmus of Panama. We went by ship from the Los Angeles Harbor to Balboa, the Pacific terminus of the Canal.

May is the hottest month of the year in Central America. Three days out from Los Angeles we began to realize that we were in the tropics. The North Star grew faint to the view and the Southern Cross became

the Mariner's guide. The temperature of the ocean from then on ranged from 84° to 86°. The heat was not oppressive and during the sixteen days that our party of one-hundred and eighty were in the tropics not one was ill from any cause. On the Isthmus there was every evidence of the official work of Col. Gorges and his assistants.

Before landing, we were told by Mr. M. H. Robbins, Jr., President of the Chamber of Commerce of San Francisco, that we would find every bed canopied and that we must first see that there was not a mosquito within the canopy and then jump in quickly and bring the canopy tightly together. When we arrived we found no canopies to the beds and no mosquitoes. We went through jungles, through all parts of the Canal and through the cities of Panama and Colon, and not one of our party either saw, heard or felt a mosquito. Their breeding places have been destroyed. There was also a marked absence of flies, as one offi-

cer said—"The people of the civilized world will in a few years realize that it is just as disgraceful to have a mosquito or a fly in the house as it is to have a louse or a bedbug."

During the month of March, 1912, the total number of deaths from all causes among employees was 36, divided as follows:

Disease, 28, and violence, 8, giving the annual average per thousand of 6.57 and 1.88, respectively.

Among employees for the month of March of each year the annual average death rate per thousand was as follows:

1905.....	12.27
1906.....	37.44
1907.....	40.23
1908.....	12.47
1909.....	8.76
1910.....	8.91
1911.....	10.76
1912.....	8.45

The annual average death rate per thousand in the cities of Panama, Colon, and the Canal Zone, including both employees and civil population for the month of March of each year, was as follows:

1905.....	36.51
1906.....	46.72
1907.....	32.32
1908.....	20.67
1909.....	17.07
1910.....	18.33
1911.....	22.22
1912.....	14.67

In segregating according to race, the annual average death rate per thousand and from disease among employees was: For whites, 2.75, and for blacks, 7.90, giving a general average for disease of 6.57. For the same month during 1910 the annual average death rate per thousand from disease among whites was 3.89, and blacks, 5.87, giving a general average of 5.39; and in 1911 from disease among whites, 3.88, and blacks, 7.76, giving a general average of 6.76.

Among employees during the month, the deaths from the principal diseases were as follows: Chronic nephritis, 3; dysentery, clinical, 2; lobar pneumonia,

3; measles, 2; tuberculosis, 6; typhoid fever, 1, leaving 11 deaths from all other diseases, and 8 deaths from external violence.

One case of yellow fever from Guayaquil was taken from the steamship Chile at the Culebra Island quarantine station on March 2, and died on March 4. With this exception no cases of yellow fever, smallpox, or plague originated on or were brought to the Isthmus during the month.

As is well known, the city of Panama was formerly a pest hole, but during the month of March, 1912, there were 72 deaths from all causes, which gives an annual mortality on the estimated population of the city of 18.42 per thousand.

While the cities of Colon and Panama are in the Canal Zone, they belong to the Republic of Panama, but the United States government maintains the control of sanitation. Besides doing the other work of sanitation in those cities, the government is also superintending the killing of rats, and find the following mixture valuable:

- 3 parts by weight of sugar
- 13 parts of oatmeal
- 4 parts of commercial arsenic.

This poison is taken by the rats much more easily than the other mixtures tried heretofore.

There are 40,000 employees at work on the canal. They appear healthy and those from the United States were, in every instance, enjoying life and enthusiastic over their work.

The Pacific Mail Steamship Company has a boat leaving the Los Angeles Harbor once a month and the cost for a round trip is about \$140.00. Probably the best time to go is December and January, although we were there in the hottest month and did not suffer from the heat. The city of Panama is directly south of the city of

Pittsburg and is 500 miles nearer Boston than Los Angeles. It is 22 miles east of Colon, and the course of the canal instead of being as one would suppose—east and west—is, beginning at the Atlantic side or Colon, south-east to the city of Panama on the Pacific ocean side, so that the new-comer is very much puzzled by the directions.

W. L.

PUBLIC WELFARE LEAGUE.

This organization is deserving the support of all decent physicians, since its main object is the elimination from our body politic of all indecent practitioners, such as abortionists, illegal practitioners, quacks and charlatans of every description. It is the antithesis of the so-called League of Medical Freedom. The Public Welfare League is composed of men and women of good repute, who are interested in the public welfare. May the history of this organization be as auspicious as has been its inception. If you are in Los Angeles, call up Dr. Ross Moore and give him your application. If you are not located in Los Angeles, write Dr. Moore and he will tell you what to do to further the work of this League. This is all to your interest more than you realize, or you would already be a hard-working member of the Public Welfare League. The work to be done is enormous, and it must be done or the medical and sanitary civilization of California will turn backward fully a quarter of a century within a year.

MEDICAL LEGISLATION.

"Not dead, but sleeping" characterizes the present condition of the medical profession of California in regard to this most important matter.

It is a certainty that the following propositions hold true:

1. That Medical Legislation is pri-

marily in the interest of the people.

The well educated physician sees more vividly than does anyone else the great risk that society runs from the horde of smooth-talking, incompetent, would-be medical practitioners that would over-run our state if a good medical law were not upon our statute books and properly enforced.

2. Every state in the Union but one now has a medical practice act and every civilized country in the world requires those who hold themselves out to be Doctors of Medicine to show by rigid examination that they are competent to treat the sick.

3. As a result of these medical practice laws, the standard of medical education has risen enormously during the past decade. The diploma mill has been forced out of existence and each year has shown a steady elimination of the commercial element from medical education.

4. Coincident with this great change in educational standards, has come the fight for pure food, suppression of fraudulent advertising, the marking of dangerous nostrums with the poison label, the demand that dishonest proprietary preparations shall be branded as such and that the drugs we use and prescribe for our sick patients shall be as represented. These great commercial interests, those who profit by food adulteration, the patent medicine and nostrum interests, as well as the great proprietary and drug houses, are fighting to retain the right to defraud the people and thus continue to enjoy the enormous financial profits accruing therefrom. They have therefore financed a great organization whose avowed purpose is the annihilation of all medical laws and the disruption of the American Medical Association.

5. This period has also introduced a host of would-be medical cults, as for example—the Eddyites, osteo-

paths, naturopaths, anti-vaccinationists, anti-vivisectionists, chiropractics, nature healers, etc., all of whom have either a desire to practice medicine without the years of preparation required by a first class medical college or else they have some grievance which is aimed at some particular phase of medical practice or sanitation.

6. There is in addition a great number of doctors of medicine, graduated from cheap commercial schools in the years past, who cannot possibly pass an examination in modern medical practice, who desire to come to California. The gaze of the world is fixed on the Pacific Coast. All recognize that we are on the verge of tremendous physical development and hundreds of physicians desire to settle here but are deterred by the fact that the examination given by the State Board cannot be passed.

7. One more element has entered into the fight on medical legislation in this state and that is the relentless prosecution which the quacks, abortionists and other illegal practitioners have suffered in San Francisco and Los Angeles at the hands of the State Board of Medical Examiners through their fighting attorneys, Mr. Kauffman and Mr. Morrow, men whose services are invaluable but who cannot be held with us much longer unless the medical profession evinces more evidence of earnestness in backing their fight than has been the case in the past.

8. As a result of the above mentioned conditions, we have the low grade medical schools and near medical schools, the patent medicine, adulterated food, and other commercial interests, the Eddyites, the poorly trained physicians who cannot pass the State Board examination, the quacks and abortionists, the antivaccinationists and anti-vivisectionists,

with many others too numerous to mention, all ready to work and spend plenty of money in order that our medical practice act shall be repealed at the coming session of the legislature.

Do the members of the medical profession and the intelligent citizens of the State intend to fold their hands and sit idly by and allow this thing to be accomplished?

Is California ready to be classed with New Mexico in being the only State where the lives of the public are not protected in this way?

Are we ready to become the dumping ground for all the incompetents and quacks who are being put out of business in other communities?

Are we to launch a blow at higher educational standards which have been developed during the past decade and thus encourage an onslaught along this line in other States?

This subject was discussed very earnestly at a joint meeting of the San Bernardino and Riverside County Societies held last month and the following resolutions were ordered sent to each County Society in Southern California with the request that these or similar resolutions be adopted and sent to Dr. Hilliard, secretary of the San Bernardino County Society, and by him turned over to our representative on the Council, in order that he may have sufficient backing to urge immediate and definite action at its next meeting:

“WHEREAS, It is evident that a concerted effort is to be made both in the National Congress and the State Legislature looking toward the removal of all restrictions relative to the practice of medicine and the protection of the public health, and

“WHEREAS, We recognize in such efforts a very serious menace to the welfare of the public and the best interests of our State and Nation, and

"WHEREAS, Such action on the part of our legislative bodies would be contrary to the stand taken by every civilized nation and practically every State in the Union, therefore, be it

"RESOLVED, That we urge upon the Legislative Committee and Council of the Medical Society of the State of California, very vigorous action in this matter: That we urge the adoption of a policy broad enough to cover the necessities of the occasion: That this plan be submitted to the profession and we hereby agree to give generous financial and personal assistance in order that it may be pushed to a successful issue."

The situation now before us is the most serious ever faced. Our opponents are well organized, have already collected enough money to finance their campaign and have able men in their employ. It is "up to you," members of the medical profession, to "get busy" and save California from this threatened peril and disgrace.

W. W. R.

A MORNING AT THE ANCON HOSPITAL

A visit to the Panama Canal Zone would be quite incomplete without a visit to the Ancon Hospital.

While spending a morning in the hospital recently my first exclamation to Dr. W. E. Deeks, the chief of Medical clinic was, "What a beautiful location for a hospital here on Ancon Hill!" His reply came at once, "Yes there is no other site comparable with it, either from a point of sanitation or beauty in the Canal Zone, but you must not give us the credit for the selection of the site. It was here that the French located their hospitals in the early eighties, and very many of these buildings are of their original construction and remain practically now as then except that they have been

screened by us." The *esprit de corps* in evidence all along the Zone is abundantly manifest in the Hospital wards. From the highest to the lowest each feels himself a cog in the wheel that is constructing one of the greatest engineering feats known to the world.

The Hospital consists of many groups of buildings rather artistically placed along winding palm bordered drives that conform to the natural contour of the rolling landscape. The Royal palm is much in evidence here and this portion of the Zone reminds one much of certain spots upon the Hawaii Islands.

The same well marked discipline that characterizes every other line of work in the project is in evidence here in the care of the sick. The great saving of life now as compared with that during the early years of work under the French Government calls for admiration from the world at large, and the call is answered by commendation from the world over. The advance of science, medical science in particular, is entitled to the credit of a reduction of death rate to a degree that has permitted the building of the canal. We were able through the courtesy of Dr. Deeks to see a number of cases of pellagra, malaria in all of its various stages, and many of the sequelae of chronic malarial conditions.

Perhaps the most interesting feature to me was the cases of intestinal disturbances due to the various forms of amebia that Dr. Deeks was able to show us and the management of the same from a medical standpoint. We were told they had been able to demonstrate no less than thirteen different varieties of amebae and that at the present writing they were fairly well convinced that the amoebia-coli under some conditions give very little disturbance, and in fact, in many in-

stances, where the amoebia-coli were found no serious pathologic condition existed.

The treatment found most efficacious in amebic dysentery was three dram doses by weight (or a heaping teaspoonful by measure) of bismuth-subnitrate given every three hours, each dose being given in a tumblerful of water. They had found that under these conditions the patient soon began to improve, and by continuing the treatment after six or eight days with similar doses given at longer intervals, and administered in the same manner the patients made a larger percentage of recovery than under any other treatment pursued. No complications of any kind had been found following the administration of these large doses of bismuth, and surgical intervention seldom became necessary when this line of treatment was followed.

Before arriving at the Zone I saw in anticipation, beds surrounded with mosquito netting and negroes at the door to swat the flies and mosquitoes. Imagine the surprise in failing to see or hear a mosquito during a stay of several days. There was no netting to protect the beds in the Hotel Tivoli. Nor the apparent necessity for it.

Concrete drains—many upon the surface—were largely in evidence. Oil covers the few places where water is allowed to remain. One hears of the death rate in what was formerly a pest hole now being reduced till it is less than that of many of our cities in a northern climate, but to impress the fact indelibly upon the mind nothing serves like a visit in person to the Zone.

G. L. C.

A DESPICABLE INSTITUTION.

Our attention has been called recently to an announcement of the McCormick Medical School of Chicago, which purports to teach some 28 sepa-

rate branches of the healing art, without recourse to the surgeon's knife or **any of the "old" school remedies.** This includes the "financial side" of the course, which is claimed by its promoter "to be the most important feature of the course," "is reduced to tabular form" and "works all the time." The details he claims, are reserved for "our" students.

As a side partner to this "institution of learning" is a pamphlet of about 8 pages issued quarterly, and directed "as a circular letter of information to the public" which contains a number of "Timely Topics," amongst which are (Jan. number) "Mental Indigestion" (whatever that is,) "Regular Rascals Exposed," in which he berates a well-known southern physician for writing an article in the J. A. M. A. denouncing the spectacle vendor, who only looks to the monetary side of his business and neglects the welfare of his patient. This gentleman he calls a fool or a knave because the latter attempted to tell the truth. One of the next topics is headed by "Revise the Codes" and here the writer takes a fall out of the gold standard, the tariff, Chicago Tribune, the laws of our land, the old school of medicine, Senator Owen, and a number of prominent medical men who are active in championing the cause of health in general. Then follows a harangue on a food table recommended by the Chicago Board of Health, and compiled by the U. S. government, which he attempts to show by foolish calculations that unless one takes his course and none others (as they are all wrong) things digestible will be amiss.

He then winds up by "Timely Tips," detailing a visit to California, where evidently the people and their customs did not suit him, and as a consequence he became afflicted with "Mental Indigestion." We presume

he returned to his home and took some of his own cure. At any rate we hope he recovered.

In another number (April) of "Mature Medicine" he makes a trip to Florida, where he develops the same "grouch." They evidently thought him a medical anarchist and did not meet him with a full brass band, and hence the "grouch."

It is too bad no one all these centuries of investigation had not discovered the only way to keep alive and healthy, before this famous school came into existence.

We understand this gentleman of learning (one Charles McCormick) is not a graduate in medicine, and was formerly a printer, later a traveling spectacle vendor, and finally got into the medical college promoting business. He has attempted to pass the Illinois Licensing Board, but failed, on account of his mediocre medical education, and this may account for the many "grouches" he has towards the medical schools, and State Boards in particular. Along in 1893 he opened the McCormick Optical College in Chicago, and gave courses to men and women and issued diplomas in eight days, with the degree of Oph. D.

At that time if the student could not appear in person the course became the conventional correspondence course. In issuing the diplomas some of the "professors" signatures happened to be the office girl, or other person who chanced to be handy, when a signature was needed.

For the past fifteen years or more this "pest" has been denouncing the regular profession, the medical laws of the land, medical colleges in general and licensing boards in particular, not only through publications of his own, but with his tongue, to whoever would stand still and listen. There ought to be some way to curb this individual's

vile and silly utterances and make him respect the laws of the land, and those who have given their whole lives to the cause of humanity.

DORSAL ROOT SECTION IN CASES OF CEREBRAL SPASTIC DIPLEGIA.

Attempts to relieve cases of cerebral spastic diplegia by methods other than that of section of the posterior roots of the nerves which supply the extremities affected, have proven uniformly unsuccessful. In a paper to which they jointly contribute, read at the 1911 meeting of the American Neurological Association, Clark and Taylor (Jour. N. Y. Med. Jour. 4/13-820/12.) present an analysis of their own and all other cases to that date. That report shows conclusively that by means of the operation and by subsequent training these patients may gain ability to walk fairly well, and with that consideration there goes very marked mental development. In short, a child which cannot stand erect and is painfully diffident and mentally distinctly defective, may learn to walk and acquire a fair degree of development.

Because in cases of Little's disease the primary lesion is cerebral, and all of the upper neurons of the motor tract, for any one nerve, are rarely or never destroyed, the inability to use the affected muscles properly is due to a spastic condition, and not to lack of sufficient voluntary motor power. Access to the posterior nerve roots is had by means of unilateral laminectomy. Through such an opening the posterior roots of both sides are readily reached without injury to others or to the spinal cord. Care has been taken to observe Sherrington's law, not to cut more than two or at least three contiguous roots.

The authors state emphatically that the operation must be limited to cases

of cerebral spastic diplegia, and that their reports and claims are strictly limited to that class of spastic conditions. The discussion of the physiology and pathology involved is elaborate and able, but for lack of space cannot be given this report.

The conclusions are as follows:

There is reason to believe that cases may be benefited by more than one operation.

In none of the operations in which not more than two consecutive nerve roots were cut has any permanent anesthesia resulted.

In cases of extensive resection of dorsal roots in the lumbar region, ataxia has not been either great or lasting, and even if it did would be far preferable to inability to stand or walk.

Atrophy has not occurred. Reflexes: Ankle-clonus has been abolished except in cases in which the first or second sacral roots were not cut.

Patellar reflexes were abolished in most but not in all cases.

Babinski reflex was abolished in all but one case.

The Achilles reflex is modified or lost in all typical resections.

Varying degrees of voluntary movements were observed in all cases. The greatest degree of improvement will obviously occur in cases in which the primary lesions are limited to the pyramidal tracts, and the amount of ultimate improvement in all cases is greatly dependent upon careful and persistent training after the activity of the reflexes has been diminished by the dorsal root section.

The ideal cases are those in children from five to eight years of age without contractions or atrophies, but experience shows that an operation is due every one of these unfortunate sufferers.

E. W.

LEUTIN TEST FOR SYPHILIS.

The following is from Zeit's report of Noguchi's lecture at the Northwestern University Medical School:

CULTIVATION OF TREPONEMA PALLIDUM.

The cultures are made by using fresh chancres, condylomata or papules, rich in spirochaetes. The lesion is cleaned with sterile salt solution and a piece snipped off and put into sterile salt solution, containing 1 per cent sodium citrate. The piece of tissue is then cut up into small pieces and one of these is emulsified in a sterile mortar with citrate salt solution.

A number of high culture tubes are used, containing a piece of rabbit kidney or testicle with 2 parts 2 per cent (slightly alkaline) agar and 1 part ascitic or hydrocele fluid, on top of which, after solidification, is placed 3 cc. sterile paraffin oil.

Into each tube a small piece of the tissue, containing spirochaetes, is pushed to the bottom of the tube. A few drops of the emulsified tissue is then injected by means of a capillary glass tube without tearing the culture medium. After 2 or 3 weeks' incubation a diffuse opalescence outside of the stab indicates spirochaetæ growths. By means of capillary glass pipettes, avoiding the central stab (contamination,) the material from the diffuse clouds in the medium outside of the stab is taken up and examined for spirochaetes.

Some of this material, demonstrated to the writer, contained dense masses of characteristic spirochaetes when examined with the dark field slide, as numerous as we see them in the adrenal, liver and spleen in cases of congenital syphilis. The cultures had no foetid odor. Those which have are contaminated.

Pure cultures only are used for transfers to a large number of other tubes, by means of a pipette and syringe. After 2 or 3 weeks' incubation the same procedure is repeated until no more bacteria grow along the central stab, the spirochaetes always growing in diffuse clouds towards the glass from the central stab into the surrounding medium. It is essential that the cultures are all grown under strict anaerobic conditions in a Novy jar, displacing the air by hydrogen and

absorbing the last traces of oxygen in the jar by pyrogallie acid and potassium hydrate.

Luetin Reaction for the Diagnosis of Syphilis.

Luetin is produced by grinding up the culture medium, containing colonies of spirochaetes in the form of diffuse clouds, in a sterile mortar. The thick paste is gradually diluted and 0.5 per cent carbolic acid or 0.3 trikresol added, heating to 60 degrees C. for 1 hour.

Dermal injections of Luetin are made in one arm, the other arm being used for control by dermal injection of sterile culture medium prepared in the same manner as Luetin, minus the spirochaetes. About 0.05 cc. Luetin is injected intradermal, a whitish swelling appearing, the size of a split pea.

In a positive reaction the point of injection is marked by an erythematous area, in marked contrast with the control, and after 48 to 72 hours an induration appears or an indurated papule, 5-10 mm. in diameter, surrounded by a diffuse zone of erythema. The induration and inflammation disappear after four days. In some cases a pustule forms, mostly in tertiary cases.

Constitutional symptoms, temperature, malaise, diarrhoea, anorexia are rare.

The reaction is absent in primary and early secondary cases. The Wassermann reaction is more constant in primary and secondary cases. The Luetin reaction may still be positive after treatment has changed a positive into a negative Wassermann reaction.

The Luetin test, therefore, appears to be especially applicable and of great value in the diagnosis of late stages of syphilis, and for the determination of a cure because it remains still positive after a Wassermann test, as the result of treatment, has become negative.

When the future history of the etiology of syphilis is written Noguchi will be credited with having dispelled the last doubt and the last discrepancies with regard to the spirochaeta pallida as etiologic factor by fulfilling the final and most important demand of Koch's laws, the production of the disease by pure cultures. Schereschewsky and Muhlen's cultures were non-pathogenic and produced foetid odors.

Noguchi's cultures are pathogenic, produce no odors and his Luetin (ground-up spirochaetes) gives specific diagnostic skin reactions.

THE SANE PULPIT.

It is indeed refreshing to find that the clergy is beginning to work hand in hand with the medical profession for better health laws. It is likewise refreshing to find clergymen who are thoroughly alive to the advance in medicine along all lines. Such a man is Reverend William H. Fishburn, D.D., pastor of the West Adams Presbyterian Church of Los Angeles. Dr. Fishburn is a scholar and a pulpit orator of wide reputation. He is pastor of one of the wealthiest, most conservative and most substantial congregations in Los Angeles. He is never a sensationalist.

The following is an extract from his sermon of May 12th:

The text was from Matthew 2:20, "They are dead who sought the young child's life."

After reviewing the flight of Joseph and Mary, the efforts of the cruel Herod to destroy the young Jesus and the futility of it all, Dr. Fishburn traced the Herods of history. It was not especially a sermon of child labor, but he most feelingly and most touchingly appealed to his congregation to labor toward the removal of the necessity for child labor, declaring that mothers should be pensioned, that childhood should be free from care, labor and responsibility. It was a mother's sermon it is true, but there was much else in it of value to the medical profession, more particularly the following extract:

"Not all of the enemies that seek the young child's life are dead. The existing enemies of the young child are many. Human greed is not dead: Evil suggestions that flaunt themselves before the young child are not dead; the allurements of intemperance, and

gaming, and the social evil, are not dead.

"The infantile diseases are not dead; the diseases produced by bad food, bad milk, bad sanitation are not dead.

"But we are doing something in our period to make the young child safe. In no other direction is progress being made more rapidly than in the direction of **wholesome sanitation**. Never before have wise physicians labored so hard to protect the child, and the child's parents, from disease and death by preventive medication as they are laboring today.

"Never before have men of substance given so largely towards the founding and endowment of institutions for the study of preventative medication, as they are giving today. Never before has the hope been as large as it is today that some of the childhood diseases are going to be abolished, that some of the unwholesome Herods of disease that slaughter children not by **fifties** as this ancient Herod did, but by millions on millions, are about to disappear.

"One would imagine that such study by patient men of science would be universally applauded. But, do you know that there exists an organization whose purpose is to halt all of this scientific progress? This hostile organization is known as The League for Medical Freedom.

"It is a winsome title, and many good persons have given their sanction to this League for Medical Freedom without awareness of what they are sanctioning. They do not know that the League for Medical Freedom asks that the doors be thrown wide open, and that every quack and charlatan be given a yet larger "Freedom" to exploit his ignorance upon a sick and suffering public.

"Every maker of quack nostrums,

every manufacturer of patent medicines, every devotee of an inane cult, every promoter of fraud and humbug, is standing behind this League for Medical Freedom and giving strength to its uninstructed hands.

"And every practitioner who could not diagnose the mumps from the measles, who would not know a nerve from a tendon, and could not discriminate between a muscle and a cartilage, is singing First Tenor or First Bass in the Chorus for Medical Freedom!

"Verily, sirs, the people need to be protected from themselves when they lift up their foolish voices in dispraise of progressive medication, and clamor to be put back again into the hands of the Hoodoo doctor and the Witch healer who will rub a rabbit's foot on the place to make it well. Being familiar with the progress the science of preventative medication is making in our world, I feel that I am exhibiting great self restraint in saying these things about the League for Medical Freedom as gently and as calmly as I am saying them now."

BACILLUS LACTUS BULGARICUS AND SOUR MILK AS FOOD.

In any investigation on the question of the use of sour milk as food two facts are invariably prominent. It will be found that the people, into whose diet it enters very largely, are either nomadic or seminomadic residents in countries, and living under conditions, in which it is not possible to keep milk fresh. That is to say, they use **sour** milk because milk is, of necessity, an important article in their dietary, and because they **cannot keep it sweet**.

The other inevitable conclusion is that there are many kinds of lactic and bacilli.

It is improbable that the names for sour milk in southeastern Asia, Ceben,

Yaghoiert, Matzoon, Giodddu, Dahi, and others, have any especial bacteriological significance.

Again they are probably all contaminated with other bacteria.

It is not satisfactorily clear just which of these products have the greatest therapeutic value, because sufficient care and system to make the reports reliable have not been made. But it is perfectly certain that the report of Dr. Ralph Oakley Clock of his successes with a certain strain of the *Bacillus Lactis Bulgaricus* deserves the serious attention of all who have to treat digestive disturbances in bottle-fed babies.

The observations were made with a strain of the bacillus inspected through the Johns Hopkins Hospital. The results achieved left little to be desired.

Dr. Clock presented his report to the New York Academy of Medicine at the meeting held March 14, 1912.

A very few excerpts will serve to show the general character of the report, and those interested will find a report and the ensuing discussion in *The Medical Record*, April 13, 1912.

A pure culture of the bacillus named, was given in tablet form. The babies varied in ages from five weeks to ten months, and the diseases ranged through the usual varieties of gastro-enteritis and entro-colitis, twenty in all. There was not a single failure or relapse. There was no change in the diet of the baby. Vomiting invariably subsided on the second day. If the results can be confirmed by others, Dr. Clock's report will be classed as truly of epoch making value. E. W.

CANCER.

We note that the Committee on Cancer of the Medical Society of the State of California has asked to be discharged for the present, deeming that the time is not ripe for the presenta-

tion of the cancer problem to the general public. This course seems to have been prompted largely by the difficulty experienced by the committee in formulating a brochure so as to give the public straight facts without presenting opportunity for the misuse of statements by the cancer sharks and others. As to the existence of this difficulty there can be no doubt. But in that regard the launching of the educational propaganda regarding cancer does not differ essentially from the difficulty experienced some time since when we started the campaign of education of the public regarding tuberculosis. The work along this line must not be deterred by such obstacles. The early diagnosis and treatment of cancer is of great importance, and the people must be thoroughly acquainted with this fact. Whether the issuance of a brochure, such as the State Society contemplated, is the best method is a question worthy of serious considerations. The time has come when physicians must be educators along the lines of hygiene and preventive medicine. The general diffusion, so far as practicable, of the knowledge we possess regarding cancer, will undoubtedly result in a great decrease in the morbidity and mortality of that dread affection.

AN UNUSUAL THEORY AND TREATMENT OF TUBERCULOSIS.

Those who are familiar with the articles by Achilles Rose, M. D., which have appeared in the medical journals during the last ten or more years know that he possesses in an unusual degree initiative, energy and enthusiasm. In the *New York Medical Journal* for Feb. 3, and April 13, 1912, Dr. Rose has two papers which measure fully up to his best standard. He is an enthusiast in his support of the theory of Hugo Weber that the cure of pulmo-

nary tuberculosis can be greatly hastened by the development of carbonic acid in the system, and he believes that an excess of carbonic acid can be brought about in the system by the use of a continuous warm bath. Dr. Rose cites two cases in his own practice in illustration and confirmation of his theory and treatment. In each case the reported clinical conditions amply establish the diagnosis, and a clinical cure is reported in each.

There are no insuperable difficulties, and no unavoidable discomforts connected with the employment of the continuous warm bath, although to one who has never seen the method in use, both the difficulties and discomforts seem at first prohibitive.

There are many successful methods of caring for cases of tuberculosis, but no physician who has charge of a case which is **not improving**, and who will read the papers by Dr. Rose mentioned in this note can escape the conviction that a new line of treatment is available to him. It is difficult to understand why this method has attracted so little attention and comment. Either Dr. Rose is suspected of mendacity—an unwarranted assumption—or physicians to whose attention his statement comes are strangely indifferent to a valuable method of treatment for many forms of tuberculosis.

The articles cited do not admit of analysis in detail and must be read in the original by anyone who desires to give the method a trial. E. W.

DR. WILEY'S ORATION.

Dr. Wiley delivered the Oration on Medicine before the Medical Society of the State of New York, taking for his subject *The Services of the Sciences to Rational Medicine*. The address appears in full in the *Albany Medical Annals*. In the prelude is the following: "As it would be the part of wis-

dom for the navigator to avoid icebergs, because he cannot destroy them, so the medical profession is striving to teach the people of the country to avoid Death, since He cannot be conquered. Fifteen hundred persons lost their lives when the Titanic went down. Hundreds of thousands of American citizens die every year of avoidable disease, yet we hardly think of this appalling disaster to humanity, although we feel most keenly the regretful disaster which sent the Titanic to the bottom."

Later in the address is the following, which at first seems rather striking: "With perhaps the exception of chemistry, astronomy is the most exact of the sciences, and yet its laws are only partially known, and it remains for future investigators to determine the extent of helio and astral phenomena upon health and medicine. I, for one, am of the opinion that the influences of the vast systems of worlds upon each particular world are dominant and eternal. The difficulty we encounter is in estimating the particular kinds of forces, and their particular effects upon each particular atom in the cosmic molecule."

HEMOPTYSIS.

In a study of 114 cases from the Out-patient Department of the Massachusetts General Hospital, Hawes gives the following summary:

Of these 114 patients, that came to the hospital because of hemoptysis from July, 1903, to Jan. 1, 1912, nine were children 15 years old or less, and in six of these pulmonary tuberculosis was considered to be the cause of the bleeding.

Seventy-eight patients, or 68.3% of the total number, were either strongly suspected or known to have pulmonary tuberculosis. Of these 78 patients, 11 were at once admitted into the hos-

pital on account of active hemorrhage while in the out-patient department. Twenty-eight of these patients, or 35.8% of the total number diagnosed as pulmonary tuberculosis or strongly suspected of having it, never returned and thus received no adequate treatment for their condition.

In order to properly handle cases with pulmonary tuberculosis, or patients suspected of having it, in large out-patient clinics or dispensaries, there should be a special department devoted to this work. The general practitioner should bear in mind that unless there is definite evidence to the contrary and a source of bleeding found in the gums, throat, nose or elsewhere, a hemorrhage from the mouth means pulmonary tuberculosis and should be treated accordingly.

VACCINATION.

When it comes to vaccination, California does not stand very high in the scale of civilization. We have before us the Public Health Bulletin No. 52, January, 1912, which deals with Vaccination, and gives an analysis of the laws and regulations relating thereto in force in the United States. Kentucky has perhaps the most comprehensive law on the subject of all the States, its provisions requiring vaccination of all adults, of all persons coming into the State to make their home there, of inmates of public institutions, and of children within one year after birth. California had a fairly good law, regarding vaccination of school children, but it has been practically annulled by subsequent legislation exempting from vaccination those whose parents or guardians are "conscientiously opposed to the practice of vaccination." Thus we have reverted to barbarism, or at least we have retrogressed fully a century in our civilization. In New Mexico vaccination is

made a prerequisite to school attendance, and penalties are provided for failure to comply with the law.

NEOSALVARSAN.

Probably you remember that about two years ago Ehrlich reported some experiments with arsenic preparations, and that the six hundred and sixth combination, that he had tried, would cure syphilis. Thus was born salvarsan. Now comes the nine hundred and fourteenth combination of arsenic, proposed by this indefatigable worker as an improvement over salvarsan. This has been christened neosalvarsan, and is formed through a condensation of the formaldehydesulphoxyl acid sodium with salvarsan. This remedy is more soluble than salvarsan and is neutral in reaction, so that it is better adapted for intramuscular injections. Schreiber, who had given about 1200 injections in 230 cases, gives the dosage as 0.9 gramme for men, 0.75 gramme for women, 0.15 gramme for children, and 0.05 gramme for infants. This dosage is increased in adults so that a strong man received four injections in seven days, amounting to six grammes of neosalvarsan, equivalent to four grammes of salvarsan.

TUBERCULIN TESTS.

Combe compared the Pirquet and Mantoux tuberculin tests over a period of two years, and concludes that the latter is far superior since it appears earlier and does not so readily disappear. That is to say, the Mantoux test would be found in cases before the Pirquet test became positive, and later the latter test would be obtained and other evidences of the disease would appear. When the tuberculous patient's resistance was lowered, as by measles, typhoid, whooping cough or influenza, the Mantoux test was only diminished in some cases, and when it

did disappear for a time, it returned before the Pirquet reaction could be obtained.

The Mantoux test is an endodermic reaction, produced by injecting into the derma 0.0001 cc. of Koch's old tuberculin. Combe believes this test of diagnostic importance, the intensity of the reaction diminishing and finally disappearing as the disease improves and is finally cured. Should the reaction increase under tuberculin treatment, Combe resorts to the use of the ultraviolet rays.

EDUCATING THE PUBLIC.

What has been accomplished by our attempts to educate the public in medical matters? The Long Island Medical Journal declares editorially that this has not lessened the public's dependence upon self-appointed health advisers, feeders, exercisers, physical culture faddists, and exponents of freak religious systems. It is important that the medical profession should maintain the confidence of the public, that we may better control whatever may pertain to hygiene and public health. In such matters the welfare of the people demands that trained and conscientious medical men shall be recognized and respected leaders. But when it comes to the medical education of the public, it is eminently true that a little learning is a dangerous thing. It is infinitely more important that the public should be educated to respect the medical men. And to this end we would favor ostracising the members of the medical profession that prove unworthy of such respect and confidence.

DEATHS FROM SALVARSAN.

Oltamare has collected data of nearly 150 deaths following the administration of salvarsan. Many of these

were evidently coincidents or due to errors in administration. In about a dozen cases death was apparently due to the drug, through its renal or neurotropic influence. In only one case was death due to a single injection in the primary stage. The investigation of these cases has led Oltamare to oppose the giving of multiple injections and to support Ehrlich's original idea of *therapia sterilisans magna*.

SALVARSAN AND MEASLES.

Williams of Boston reports a case that seems to show that salvarsan has no effect on the development of measles. 0.6 gm. of salvarsan was given intravenously March 31st, and the Koplik spots were in evidence April second.

The following extract from the address of the president of the Missouri Eclectic Medical Society may interest you in a way probably not intended by the Doctor:

"Another recommendation I would like to make is that wherever we find a group of Eclectics and Homeopaths in the state, that we organize Societies of Medical Research and meet once a month. This will be a local ad for you and through these societies legislative work may be done."

Excellent reasons for establishing medical research societies!

The following from the Pacific Drug Review:

"Do not permit counter prescribing in your store. The customer for whom you prescribe eventually must go to a physician, if he lives long enough and don't take too much of the druggist's concoctions, and he tells the doctor you have been treating him, which, of course, makes the medical man very kindly disposed toward you."

STATE BOARD STATISTICS.

We glean the following from the State Board number of the Journal of the American Medical Association:

20.9%, Idaho 24.1%, Illinois 26.3%, Kansas 30.9%, Massachusetts 24.7%, Mississippi 49.6%, Montana 30.1%, New Hampshire 21.8%, New Mexico

College.	Total Examined.	Passed.	Failed.	Number of States Examined In.
Cal. Eclectic Medical College.....	2	1	50.0	1
College of P. & S., Los Angeles.....	12	10	16.7	2
College of P. & S., San Francisco.....	17	13	23.5	1
Cooper Medical College.....	28	26	7.1	2
Hahnemann Med. Col. of the Pacific.....	7	7	0.	1
Oakland College of Med. & Surgery.....	0	0	0.	0
University of Cal. Med. Dept.....	20	18	10.0	5

The percentage of failures to pass the California examinations has been comparatively low, only 20.6%. Those showing a higher percentage of failures are: Alabama, 33.5%, Arizona, 24.3%, Arkansas 21.7%, Connecticut 21.5%, District of Columbia 24.2%, Florida

50.0%, New York 23.4%, North Carolina 24.6%, Oklahoma 24.1%, Oregon 37.4%, South Carolina 22.3%, Virginia 27.3%, Washington **29.7%**.

In 34 states permitting reciprocity, there were altogether only 1128 physicians registered in this way.

Cohendy, in the Annales de l'Institut Pasteur, declares that his experiments show that life is possible without bacteria. However, most of us will not be able to get along without them. The experiments showed that the bacteria-free chicks do not take such good care of food stuffs, indicating that the intestinal bacteria probably are beneficial. This may be true of some strains and varieties.

As we go to press, the Thirty-ninth National Conference of Charities and

Correction is in session in Cleveland, Ohio. In this meeting physicians are interested professionally and as citizens. Among the important social diseases that will receive consideration at this time, special attention will be given tuberculosis, syphilis, hookworm disease, and alcoholism. This is assigned to one of seven sub-committees of the Committee on the Relations of Medical and Social Work, which this year for the first time occupies an independent place upon the program.

EDITORIAL NOTES**THE TITANIC DISASTER.**

We had thought of writing something about the Titanic disaster. But it was only an impulse. Tuberculosis is so much more important that the Titanic disaster becomes comparatively insignificant.

ORAL HYGIENE.

The May number of Oral Hygiene is so good that we are impelled to give it this bit of free advertising. This is a journal for dentists, edited by George

Edwin Hunt, who is both a physician and dentist, and published monthly by Lee S. Smith & Son Co., of Pittsburgh. Cleanliness of the mouth, both literally and figuratively, is of inestimable importance. Many serious diseases, such as pneumonia, tuberculosis and cancer, may originate through or be made worse by defective oral hygiene.

Dr. L. A. Perce of Long Beach is improving after a long illness.

Dr. J. D. Beatty of Highland Park has left for Vienna to be gone several months.

Dr. F. D. Bishop of Long Beach has been in the hospital, suffering from an injured elbow.

The Good Health Magazine for June bears the striking title: Fasting, the Kill-Cure Fad.

Dr. F. D. Bishop has been confined to the Seaside Hospital, Long Beach, by an infected arm.

Dr. E. R. McPheeters has succeeded Dr. Fales, resigned, as physician for the Shannon Company at Clifton, Arizona.

Bisbee has adopted an ordinance to prevent the spread of hydrophobia, several cases having occurred there recently.

The engagement is announced of Elizabeth Richards to Dr. Warren Nichols Horton. It is to be a June wedding.

Dr. Powers tells us you haven't been reporting all your contagious cases. The goblins will get you if you don't watch out.

The unhygienic roller towel has been barred from the San Francisco public resorts, through action of the Board of Supervisors.

First Assistant Surgeon Captain C. E. Elliott, of the Soldiers' Home, died at that institution May 7th, after a brief illness.

Dr. Titian Coffee has resigned as president of the City Housing Commission of Los Angeles, but will continue a member of that commission.

After prolonged illness, Dr. M. A. Menges passed away at Santa Ana May 3rd. The Doctor was one of Santa Ana's most prominent residents.

We note that the improvement of the San Diego Hospital is opposed by Dr.

Chas. T. White, but we fail to find this "Doctor" in the latest medical directory.

We hope the United States Senate will not take too seriously the attacks upon our profession by Senator Works, who is so nefariously misrepresenting us.

Dr. E. W. Adamson has been appointed to succeed Dr. F. T. Wright, resigned, as examining physician for the United States Bureau of Immigration in Douglas.

The Seventeenth International Congress of Medicine will be held in London, August 6-12, 1913. The scientific work of the Congress is divided into twenty-two sections.

Dr. C. C. Haskell, of the Pharmacological Department of Eli Lilly & Co., was in attendance at the Atlantic City meeting of the American Medical Association.

Dr. D. B. Northrup, county physician, San Diego, is charged with performing an illegal operation at the Agnew Hospital, that resulted in the death of the patient.

It seems that a parkway may become a medical question. It is reported that the Philadelphia Parkway will cut through the Medico-Chirurgical College buildings.

Dr. F. E. Shine of Bisbee, who has just retired as president of the Arizona Medical Association, has been named by Governor Hunt as a member of the State Board of Medical Examiners.

San Bernardino is to be congratulated upon the action of the board of managers of the Southern California Hospital, directing that screened sleeping porches be provided for the insane.

Dr. Fenton B. Turck of Chicago spent two months in London repairing the shattered stomach of Frederick

Stack Pearsons, for which the Doctor is reported to have received \$25,000.00.

Dr. M. E. Eastman announces his removal from Alturas, California, to New Pine Creek, Oregon. The Doctor is going up to the new gold mining camp of High Grade. Our best wishes are with him.

The American Journal of Surgery for May contains an article on The Myoma Heart, by Charles Clifford Barrows, of New York, giving the heart symptoms in connection with uterine growths.

There is an able article by Thomas E. Satterthwaite, on Graphic Methods and Instruments in the Diagnosis of Cardiac Affections, in the April issue of the Monthly Cyclopedia and Medical Bulletin.

Dr. C. P. V. Watson was found guilty of malpractice in Department Twelve of the Superior Court, May 16th. It seems that this is one way to classify an illegal operation that takes the life of the patient.

Dr. Charles H. Whitman, superintendent of the Los Angeles County Hospital, has gone east for a month to attend some medical society meetings and study modern hospital construction and management.

The Boston City Record shows the following expenditures for the health department of that city:

1908-09, \$60,651.57; 1909-10, \$62,986.81; 1910-11, \$61,331.87; 1911-12, \$71,609.50; 1912-13, \$80,381.93.

Dr. Gordon F. Lyon of Pomona has become a benedict, thus changing the name of Edith M. Patten, daughter of Mr. and Mrs. Weston S. Patten of Pomona. Contributions of old shoes and rice will be cheerfully received.

It is reported that the new Marengo hospital, to cost \$250,000.00, is to be built upon Marengo avenue. The proj-

ect is fostered by Dr. H. A. Fiske, Charles W. Wardell, A. Udell, C. M. Simpson and W. H. Hubbard.

A reporter of the San Diego Sun visited the County Hospital, and apparently followed his instructions to write just what he found there. Wonder how many of our public institutions would be proud of such an investigation.

E. J. Lickley has been declaiming against school instruction in sex hygiene, claiming the subject is too sacred to be handled save in the home. We would suggest that home instruction along that line has signally failed in the past.

The following have been appointed members of the Arizona Board of Medical Examiners: Dr. W. A. Holt, Globe; Dr. F. E. Shine, Bisbee; Dr. George R. Sampson, Winslow; Dr. R. M. Tafel, Phoenix, and Dr. John W. Thomas of Phoenix.

We are in receipt of an interesting reprint on Tree Cancer, by Horace Packard, M.D., professor of surgery in Boston University. Also a reprint on Demineralized Food and Cancer, by the same author. Both reprints are thought stimulaters.

Dr. Oran Newton was elected president, and Dr. E. R. Harvey vice-president of the Southern California Eclectic Medical Association, May 7th, at the annual meeting, which was held at Long Beach. Incidentally, both these physicians are located at Long Beach.

Dr. Alexis Carrel of the Rockefeller Institute has reported some striking results in attempts to keep tissues alive outside the body, preserved in suitable media. Thus it is said that fragments of the heart may pulsate two months after removal from the body.

The following are the officers of the proposed hospital at Pomona: Dr. E. E. Kelly, president; C. P. Curran, vice-president; Dr. J. K. Swindt, secretary; F. E. Graham, treasurer, and W. A. Vandergrift. The stock amounts to \$40,000.00, about three-fourths of which has been sold.

Dr. Archibald von Smelker, formerly resident surgeon of Wesley Hospital, Chicago, and now district surgeon for the Southern Pacific Railroad Company of Mexico, is contemplating removing his capital from Mexican holdings and investments to Los Angeles property. Wise man.

Through the personal efforts of H. S. Wall, superintendent of shops, the Santa Fe is to at once open a well-equipped emergency hospital at its plant in Los Angeles. This will be in charge of Dr. Beeson, assistant to Dr. N. H. Morrison, chief surgeon of the company. There will be a corps of trained nurses.

Dr. Morton of San Francisco, one of our editorial staff, conducted an interesting clinic at Anaheim Sanitarium, where he was the guest of Drs. Johnston and Beebe. The Doctor showed the practicability of performing major operations under spinal anesthesia, which he has employed in more than five thousand cases.

Dr. H. C. Suess, a homeopathic physician of Topeka, Kansas, has proposed to expend \$200,000.00 to be provided by an association in a formative stage of development, for the erection of sanatorium buildings, park, etc., at Roswell, N. M., if that municipality will provide \$40,000.00 to secure this expenditure. Careful, Si.

Dr. George Tucker, the ubiquitous lecturer on health subjects, delivered an address before the First Congregational Church Brotherhood of Riverside

May 14th, that was evidently very well received, and will do great good in directing the attention of an excellent body of laymen toward the local medical and sanitary conditions.

San Diego seems sort of on the fence as to whether to try to convince herself that the County Hospital is an exemplification of perfection, or to go ahead and make some improvements suggested by the County Medical Society. These consist chiefly in permitting the County Medical Society to nominate the medical staff for the hospital.

The following class graduated at the Pasadena Hospital School for Nurses May 20th: Laura Julia Johnston, Naomi Josephine Hopf, Kathryn A. Plimpton, Bessie E. Stephens, Mayr W. C. Gibbs, Irma A. Wood, Jane B. Bushby, M. Margaret Jack, Susie Ferguson Hunt, Margaret Violet Macey, Anna Louise Sommer, Hulda C. Hansen and Dora Ellen Lamar.

The New Mexico Medical Journal for May contains several excellent original articles, including "A Comparison of the Wassermann and Noguchi Reactions, and the effect of Treatment on these reactions, with report of cases," by Saling Simon, M. D., of Denver, and "Altitude and Blood Pressure, especially in Pulmonary Tuberculosis," by J. L. Pomeroy, M. D., of Monrovia.

The article on "Treatment of Fractures" by Dr. M. L. Harris of Chicago, in the Atlantic City Number of the Journal A. M. A. May 4, 1912, shows very clearly that that branch of surgery has made very radical progress in the last decade. It is equally apparent that the progress is due to the combined use of three factors, the X-Ray, Lane's plates and an absolute asepsis.

The Tulane University, of New Orleans, announces the opening of its

summer school of medicine June 3rd. These summer schools are being run by a number of the prominent colleges of medicine in this country, and are deservedly popular, since they afford the general practitioner an opportunity to brush up on modern methods in a short time at a season when practice is least exacting.

The El Centro Press gave Dr. Virgil McCombs quite a send-off in its special edition May 4th. Some of these reading notices contain much that resembles quackery, especially if the same hyperbole were applied in the daily press to some irregular physician. Dr. Laurence L. Lindsey also receives a notice in this review of prominent men of the Imperial Valley. Likewise Dr. W. H. Wimp.

The will of Augustus W. Openhym, a silk merchant of New York, provides that a fund of \$275,000.00, left in trust to his wife for life, shall eventually go in equal parts to the Mount Sinai Hospital and the German Hospital and Dispensary and Columbia University. The Columbia University fund is to be used for research into the cause, prevention and cure of cancer.

The following officers were elected by the Orange County Medical Association at the annual meeting, May 11th: Dr. Ida B. Parker, Orange, president; Dr. H. A. Johnston, Anaheim, vice-president; Dr. John Wehrly, Santa Ana, secretary; Dr. H. S. Gordon, Santa Ana, treasurer, and Dr. C. D. Ball, Santa Ana, librarian. The last named office is usually not very strenuous in medical societies.

From the May Pacific Medical Journal: "One death in seventeen is due to cancer, according to Dr. Clay E. Griffin of the University of Colorado, in a talk to the university scientific societies today. Dr. Griffin further asserted that 40,000 persons die annual-

ly from cancer in the United States. He explained that this meant a loss of \$208,000,000 every year, and that \$500,000 spent in educating the people concerning cancer would save \$17,000,000 the first year."

The successful use of these aids enables a skillful surgeon to know exactly what the condition and position of the parts are, to fix the bones rigidly in the proper position, and to secure primary union in all uninfected cases, and in many which are infected when they come under the care of the surgeon.

The article is an admirable one in every respect, and should be read by every one who either practices surgery or desires to be well informed as to modern management of fractures.

The following are the new officers of the Arizona Medical Association: Dr. John E. Bacon, Miami, president; Dr. I. E. Huffman, Tucson, first vice-president; Dr. E. W. Adamson, Douglas, second vice-president; Dr. W. Warner Watkins, Phoenix, secretary; Dr. G. A. Bridge, Bisbee, treasurer. The new members of the council are: Dr. W. I. Simpson, Phoenix; Dr. R. D. Kennedy, Globe, and Dr. John R. Whiteside of Kingman. The essayist for the next annual meeting is Dr. Mark A. Rodgers of Tucson. Next meeting May 6, 1913, at Globe.

Dr. William A. Weldon, U. S. quarantine officer of the port of Los Angeles, has rushed to the metaphorical rescue of the hobble skirt, though he does not extend his chivalry to the defense of the sheath gown. We are not sure but that women ought to be hobbled, but it is difficult to understand why the Doctor should claim that the majority of men have legs that either look like a pair of calipers or an animated letter X. Our respect for the fair sex deters us from discussing fur-

ther the comparative bowleggedness and knock-kneedness of the sexes.

It is reported that a Mrs. Ella B. Rea, gallantly joined by her husband, has instituted suit against Dr. Charles A. Shepard for \$50,360.00 damages, alleging that for four months he insisted she had—and treated her for—tuberculosis, when in reality her ailment was hay fever. The patient remained under Dr. Shepard's care from July, 1911, until November, when Dr. Ethel Leonard convinced her that she had only a cold and hay fever. It occurs to us that either one or both these physicians have erred in diagnosis or ethics, or both.

Dr. Joseph W. Matthews of Louisville, Ky., addressed a large audience at Riverside May 7th, on "The seven ages, or how to protect the public health." He emphasized the fact that ought to be well known and more generally recognized, that "every contagious and infectious disease can be prevented." Some of the Doctor's remarks were so good that we cannot refrain from noting them. Thus, "Every minute an American life is lost by a preventable disease." And, "It is just the same to you whether you are killed by a cannon or a pop-gun, a lion or a fly." We would that there were more Matthews.

Dr. John M. Shaller, of Denver, in the Denver Medical Times for May, discusses "Chiro-practic—What is it?" The article is much more liberal than the chiropractics would have us believe a regular medical man could be when discussing their practice. We agree with the Doctor, that "When people ignorant of medicine perform cures, especially after the patients have failed to respond to medicine or surgery, the results are heralded as being miraculous. They are given very much greater prominence than if physicians

had made the cure. It is expected of the Doctor but not of the layman." The article is a most interesting resume of the subject.

The Sixth Annual Report of the Henry Phipps Institute for the Study, Treatment and Prevention of Tuberculosis, embracing the period from February 1, 1908, to February 1, 1910, contains clinical and sociological data on a great many subjects in relation to tuberculosis. These are based on nearly eight thousand cases. In the table on Household Conditions, 3551 patients are recorded. The average number of persons in each of these patients' houses was 5.82, the average number of sleeping rooms was 3.24, and of beds 3.97. Out of nearly six thousand cases, a source of contagion could be traced in over 60%—"this despite the ignorance of many of the patients and the falsification of not a few."

Last month the Pacific Pharmacist entered upon its sixth year. May its years be many and its influence for good great. In this issue there is the following succinct editorial: "The League for Medical Freedom has a large following among Christian Scientists, Homeopaths, Osteopaths, mental healers and Emanuelists. It has the backing of many small country papers (including Life), and the uneducated generally, it has the financial support of the manufacturers of patent and proprietary remedies. It is strongly opposed to vaccination, the use of sera in the treatment of disease, medical inspection of schools, propaganda directed against the extermination of tuberculosis, a national department of public health, etc.; in fact, opposed to all progress in medicine and pharmacy. Keep away from the league."

The April issue of the Monthly Bulletin of the Department of Health of

the City of New York is devoted largely to the Division of Child Hygiene and its work. This Division was created in 1908 and now comprehends the following activities:

1. The control and supervision of midwives.
2. The reduction of infant mortality.
3. The supervision of foundling babies boarded out in homes.
4. The inspection and sanitary supervision of day nurseries.
5. Inspection of institutions harboring dependent children.
6. Medical inspection and examination of school children.
7. Vaccination of school children.
8. Enforcement of that part of the Child Labor Law which relates to the issuing of employment certificates.

Few doctors escape more or less of a shock in reading such a title as "The Passing of Bismuth Paste," and yet Dr. Wallace Blanchard (Medical Record, May 18, 1912) states his case well and amply sustains his contention. His standing in Chicago, as an orthopedic surgeon entitles his statement to careful consideration.

He reports 106 cases of sinuses from tuberculous bone disease very successfully treated with bismuth paste, but 152 cases were more successfully treated with a non-toxic substitute, and he vigorously protests against the further use of bismuth paste in these cases. Chicago alone has had a dozen cases of severe poisoning and two deaths from extensive use of bismuth paste. Dr. Blanchard uses three formulae as substitutes for bismuth paste. They contain different proportions of white vaseline, white wax paraffine and carbonate of iron. An abstract cannot adequately represent the article.

Number one of volume one of Brain and Brawn has made its appearance. This publication is edited by Harry

Ellington Brook, N. D., and issued by The Naturopathic Publishing Company, of Los Angeles. It is essentially a continuation of the writings formerly incorporated in The Care of the Body department of the Times. Possibly we might add, from the editorial introduction, that among the objects chiefly in view are "The combating of medical errors, such as the germ theory, drugging serum injection, unnecessary surgical operations and vivisection." We do not know the editor personally, but we are acquainted with his literary effusions, and only regret that such an able writer does not use his talent more wisely. If he would, he could be a power for good, rather than simply the writer of sensational trash that attracts attention chiefly because it attacks everything of known value that has marked the progress of medicine, hygiene and rational sanitation for a full generation.

Those who are interested in the question of antityphoid vaccination, will find a very valuable and excellent report by Major Frederick F. Russell in The Journal of the A. M. A. May 4, 1912.

The report analyzes the reports of the English and German armies as well as those of our own. In the second division of the seventh army corps at Jacksonville Florida in 1908 there were 10,759 men, 248 deaths from typhoid fever and 281 from all causes. Among 12,801 at San Antonio, Texas, in 1911, there were no deaths from typhoid fever, and eleven from all causes. The report shows conclusively that the medical corps had learned how to take admirable sanitary care of the camps.

The conclusions announced by Maj. Russell are: Antityphoid vaccination in healthy persons is a harmless procedure. It confers almost absolute immunity against infection, and was the principal cause of immunity of the

troops in the Texas manoeuvres. It apparently protects against the chronic bacillus carriers. It rarely causes even an appreciable amount of personal discomfort.

The Necessity for Safe Water Supplies in the Control of Typhoid Fever, by Allan J. McLaughlin, Passed Assistant Surgeon, Public Health and Marine—Hospital Service. Reprint from Public Health Reports—No. 76. 1912.

This address was delivered before the Illinois Water Supply Association, at Urbana, Ill., March 5, 1912.

In 50 registration cities of the United States, with an aggregate population of over 20,000,000, the typhoid death rate for 1910 was 25 per 100,000. In 33 large cities in Russia, Sweden, Norway, Austria-Hungary, Germany, Denmark, France, Belgium, Holland, England, Scotland and Ireland, with

an aggregate population of 31,500,000, there was a typhoid death rate of 6.5 per 100,000. That is to say, on an average in every 100,000 population we had, compared with European results, 18.5 deaths and at least 180 cases of typhoid fever which should never have occurred.

We heard a great deal of the terrible ravages of cholera in Italy in 1910-11; yet in these two years there occurred in Italy about 16,000 cases of cholera with about 6,000 deaths, and in the United States in the same period we had more than a half million cases of typhoid fever and 50,000 deaths.

Wish we had more space for this review.

How about the water supplies in this region? Will the Owens River supply of water be and remain free from contamination?

SOCIETY PROCEEDINGS

CLINICAL AND PATHOLOGICAL SOCIETY, MEETING OF NOV. 25, 1912.

Scientific Program—Presentation of Patients.

CONSERVATIVE TREATMENT OF COMPOUND FRACTURE.

Dr. Guy Cochran presented a patient who four years ago had suffered a compound fracture of the bones of both legs. Infection was very severe but amputation was delayed for several days awaiting improvement in the patient's general condition and finally, after dragging along for about nine months, the man left the hospital with two good legs. Though both knee joints are full of rice-bodies, they give him no trouble. The case was an excellent example of the worth whileness of dragging along infected bone

cases. An equally interesting feature was the fact that this patient had had severe stomach symptoms for years. While on light diet in the hospital he improved, but upon leaving the hospital the symptoms recurred. As he was not a good surgical risk, he was advised to go to the springs, but instead he did a forty day's fast, walking from three to five miles daily. After the first few days he was not hungry, the bowels moved regularly, and, after thirty days he was not thirsty and did not take a drink of water. In the four years that have intervened he has been absolutely well. He has not eaten meat or eggs since. He eats oatmeal or bread for breakfast and a little salad during the day, and his health is as good as it has ever been.

DISCUSSION.

Dr. Charles Browning had seen a somewhat similar case. A peculiar feature in that case was that a piece of the tibia apparently about an inch and a half long was driven through under the skin. The condition was such that it could not be removed, and afterward it became joined to the tibia, the x-ray showing the bone in that position.

PRESENTATION OF SPECIMENS.

I.
TUMOR OF CEREBELLUM.

Dr. Charles L. Allen presented a specimen of tumor of the cerebellum removed post-mortem. The man was 23 years old, and for a month before entering the hospital had suffered with intense headaches, and attacks of sudden vomiting. Later there was staggering gait and optic neuritis in both eyes. There was a little weakness on the left side. He became suddenly worse and died, probably from pressure on the vital centers. The tumor was apparently a gliosarcoma.

II.
TRAUMATIC MENINGITIS.

The second specimen was the brain of a man 30 years old who had had a fall and suffered a Colle's fracture. Two weeks later he had all the signs of a meningitis. Lumbar puncture revealed the diplococcus and though Flexner's serum was used, he died. At autopsy there was found a long fracture in the posterior fossa of the skull, at the base. There was pus around the pia mater and hemorrhages at the base.

III.
PNEUMOCOCCUS MENINGITIS.

The third specimen was a brain showing pneumococcus infection. This man also had received Flexner's serum. When Flexner's serum is given, the pneumococcus is sometimes capable of undergoing phagocytosis, and in both these cases the pneumococci were found in the cells and apparently had been taken up by them.

IV.
PNEUMOCOCCUS NEURITIS AND MENINGITIS.

This was a specimen (brain) removed from a man of 62 years. Screw worms had been removed from the nose in August. When he entered the hospital a diagnosis of neuritis was made, and a week before operation he suffered with intense headache, the temperature went up, there was stiffness of the neck and a beginning optic neuritis. There was some pus exuding from the nose, and an otitis media was discovered. Lumbar puncture showing the diplococcus, Flexner's serum was injected but the man died. At autopsy all the accessory sinuses on the right side, except the antrum, contained pus. The organism here was the pneumococcus.

DISCUSSION.

Dr. Hastings said that the only evidence of meningitis was the stiffness of the neck. The suppuration in the nose had probably lasted a long time. There was absolutely no frontal tenderness. The right ear drum was inflamed but not abscessed. He had seen a similar case with Dr. Edwards, and at autopsy the conditions were the same—meningitis, with pus in the spaces at the base of the brain. On stripping the dura off the petrous bone the whole thing was found to be carious. The pus had either gotten in through the internal ear or some of the larger cells of the petrous, followed by necrosis and meningitis.

Dr. Stanley Black reported a case he had seen recently in which there was a diagnosis of meningitis. The brain was simply plastered over with pus. On examining the dura over the left carotid, he found it was possible to introduce a probe down to the bone, i. e., there was a fresh rent in the dura. Some one had operated upon the patient for nasal trouble and had evidently produced this injury. There was naturally no petrous portion of

the temporal bone covering the carotid artery, and the director went through this rent directly into the sphenoidal sinus.

Dr. Rogers stated that the patient had been operated upon by some physician who said he had "cut a flap and let some pus escape." Ten days later the patient died as already described. As to whether the screw worm had anything to do with the meningitis in the last case reported by Dr. Allen, he thought not, as there must have been some pus there before that to attract the fly.

V.

PRIMARY PULMONARY CARCINOMA.

Dr. Black presented a specimen of lung showing a primary carcinoma of that organ, a tentative diagnosis of tuberculosis having been made by the physician who first saw the patient in Boston.

VI.

UTERINE FIBROID.

Dr. Carl Kurtz presented a specimen of uterine fibroid removed by the supravaginal route.

VII.

GUNSHOT INJURY.

Dr. Kurtz also reported a case he had seen with Dr. Sassella. A man 23 years old had received a bullet wound in the occiput and also a bullet wound in the abdomen. The following day he was delirious with a temperature of 101 degrees, pulse 100 and respiration 40. The wound was about one inch below the occipital protuberance and one and three-quarters inches from the median line. This was on October 28th. On November 1st the patient became rational, temperature and respiration improved, with pain in the occipital region, and no perception of light. A week later the pulse was 80, respiration 28 and he was able to see light, headache continued, but no sensory or motor disturbances. On November 15 the wound was still discharging pus and the bone was de-

nuded, showing an opening three-fourths of an inch in diameter. This was enlarged to two inches. Pus escaped from the wound in the dura and within a cavity about two by one and one-half inches the pieces of the bullet were found and removed. The patient was in profound shock for three or four hours that afternoon but rallied, and the headache ceased. He had still (on November 25th) a right-sided hemianopsia but was able to see large type, and seemed to be recovering. A peculiar thing was that while the abscess was increasing he was continuing to see better.

DISCUSSION.

Dr. J. T. Fisher had seen the patient two hours after he was injured. He was in a semi-delirious condition but was able to answer questions. He was not blind at that time. The reason given for not operating upon him at the hospital was that the bullet had passed right through the abdomen. He believed the man now had a fair chance of recovery.

Dr. Kurtz said that the wound in the abdomen was probably only a flesh wound. Two X-ray pictures failed to show the bullet.

Dr. Cole said that one of the reasons for not operating the following day was that the man had no other apparent injuries about the head and he was totally blind and had this bullet wound in the back of the skull. They concluded that if that bullet from the back of the brain had gone deep enough to cause total blindness, it was not worth while to operate. He would like to know the cause of that blindness.

Dr. Kurtz replied that the reason he had operated was because he concluded that the bullet was located in the region of the center of sight.

Dr. Witherbee thought a blood clot had settled around the bullet increasing the pressure in the lobe until it

affected the visual center, then when it suppurated and broke down, the pressure was relieved and the sight improved.

Dr. Brainard had understood that when the man was shot he suddenly lost his vision.

Dr. Witherbee replied that the shock might have done that.

Dr. Orbison referred to a case in which a man had been shot by a companion while hunting. It was a glancing blow, the bullet did not enter the brain, but the man was blind for some hours. He believed it was due to the terrific impact of the bullet. The man was also partially deaf on one side, and as this was permanent, it was possible that there was a small fracture on one side.

Dr. Sassella said that the complete blindness immediately after the shot led him to believe that the optic chiasma had been destroyed, but it seemed now quite clear that the left side had remained intact, the bullet merely destroying some of the fibres on the right side, and as some of the fibres go to the left side and some to the right, one could easily see how the vision, though weak, was not entirely destroyed.

VIII.

TRAUMATIC RUPTURE OF EYEBALL.

Dr. A. C. Rogers presented a specimen of an eye-ball which had been ruptured by the blow of a hammer. The patient did not wish the eye removed, but four weeks after the injury the other eye developed a classical iridocyclitis and the injured eye had to be removed.

IX.

APPENDICITIS ABLITERANS.

Dr. Henry Sherk presented a specimen, a mere thread of an appendix, the result of an appendicitis abliterans.

X.

PERFORATING ULCER OF PYLORUS.

Dr. Sherk's second specimen was a perforating ulcer of the pylorus, operated upon three hours after perforation. The ulcer was excised, taking out almost the complete circumference of the pylorus, making an end-to-end anastomosis of stomach and pylorus.

XI.

CARCINOMA OF UTERUS.

Dr. Witherbee presented a specimen of carcinoma of the fundus of the uterus, removed from a patient 75 years old. The patient had made better progress since operation than a patient of thirty years operated upon about the same time.

XII.

UTERINE CANCER.

Dr. Witherbee presented a second specimen removed from a patient of 30 years, in whose family there was a history of cancer. The uterus looked suspicious and at the patient's request, it was removed.

XIII.

EXTRA-UTERINE PREGNANCY.

Dr. Witherbee's third specimen was an extra-uterine pregnancy.

XIV.

FOREIGN BODY IN NASO-PHARYNX.

Dr. Witherbee also presented a shoe buckle which he had removed from the naso-pharynx, just over the soft palate, where it had been for six weeks. The child was thought to have swallowed the buckle, but it was never found and the child developed some tenderness in the region of the ileo-caecal valve, but an X-ray failed to show the buckle. Another picture showed it to be back of the palate. There had been no other symptom except slight difficulty in breathing.

Dr. Bullard spoke briefly of the work of the League for the Protection of Public Health.

CAUSE OF FALL OF AVIATORS.

Dr. F. C. E. Mattison referred to the cause of the fall of Mr. Rogers, the

aviator, and of other similar accidents where apparently the mechanism is in good working order. He called attention to the fact that the theory had been advanced that there were pockets of bad air over cities of such a nature as to produce sudden unconsciousness. Mr. Rogers had said that he had seen the beach distinctly when it began to get dim and dark and then suddenly everything was blotted out. The machine had fallen probably faster than if it had not been in running order, and it was miraculous that the man lived to tell the story, as he was about 200 feet up in the air. He had no consciousness of having fallen. This man had never felt dizzy, never felt the altitude even when crossing the Rockies, and he was feeling perfectly well that morning; he had traveled 70 miles an hour and was never conscious that it hurt his ears. This man does not drink, smokes but little, has no bad habits, and had had no indigestion. The question was, what happened to him?

DISCUSSION.

Dr. Brainard said that was sometimes the effect of gasoline poisoning. He recalled being called to see such a case and before he got there three people were unconscious, the man who entered the house ahead of him fell unconscious, and it was with the greatest difficulty that he himself had managed to get to the door. Furthermore, a current of air followed a machine, just as there was more smoke in the front portion of a car. The gas that formed from a leaking gasoline tank undoubtedly acted very quickly. There was some gas produced, the name of which he could not recall, that asphyxiated very quickly.

Dr. Mattison had seen such cases but as a rule they had difficulty in breathing and remembered that fact. This man did not, and there was no

evidence that the tank had leaked before falling.

Dr. J. Ross Moore thought it worth while considering whether the memory he now had of things might not go further on when he had entirely recovered. In fact, perhaps nothing had happened to him but that something had happened to the machine, and that the memory of that would come back to him.

Dr. P. C. Pahl called attention to the fact that with submarine boats run with gasoline under water it is necessary to watch the man who runs the engine as he is very liable to become suddenly unconscious.

SOUTHERN CALIFORNIA MEDICAL SOCIETY.

The forty-seventh semi-annual meeting of the Southern California Medical Society was held in Pasadena at Hotel Maryland on May 1st and 2nd and the following program was enjoyed:

Wednesday, May 1—2:30 P.M.

Dr. A. S. Granger, Los Angeles. Report of the recent Chicago epidemic of Streptococcus Infection of the Throat.

Dr. Hill Hastings, Los Angeles. Epidemic of Streptococcus Throat Infection in Los Angeles. Discussion, Dr. Joseph M. King.

Dr. Norman Bridge, Los Angeles. Borderline Cases of Tuberculosis. Discussion, Drs. Chas. C. King and Henry B. Stehman, Pasadena.

Dr. Lenora M. Breed, Pomona. Some Clinical and Experimental Observations with a Saccaromycete. (Illustrated with lantern slides.) Discussion, Dr. J. K. Swindt.

Thursday, 2 P.M.

Dr. Geo. E. Tucker, Riverside. How Laymen, Physician and Health Officer May Co-operate in Public Health Work. Discussion, Dr. L. M. Powers.

Dr. E. C. Moore, Los Angeles. Cardio-Spasm. Discussion, Dr. Dudley Fulton. (Ill. with instruments.)

Dr. W. P. Millspaugh, Los Angeles. Oesophagosecopy for Removal of Foreign Bodies. Discussion, Dr. Eliot Arden. (Ill. with instruments, etc.)

Dr. Andrew Stewart Lobengier, Los Angeles. Surgery of Oesophagus. Discussion, Dr. Guy Cochran.

Dr. R. S. Lavenson, Los Angeles. The Importance of Carbohydrates in the Treatment of Diabetes Mellitus. Discussion, Dr. Reinhard Wernick.

Dr. Dudley Fulton, Los Angeles. Clinical Symptoms of Renal Insufficiency. Discussion, Dr. R. S. Lavenson.

Thursday Evening, 7:45 P.M.

Symposium on Syphilis and the Wasserman Test. Arranged by Dr. C. W. Bonyng.

Dr. C. W. Bonyng, Los Angeles. The Wasserman Test—Its Theory and Practical Application.

Dr. Leon Joseph Roth, Los Angeles. Review of the Treatments.

Dr. W. A. Edwards, Los Angeles. Relation to Children.

Dr. Elbert Wing, Los Angeles. Relation to Nervous Diseases. Discus-

sion, Dr. Walter A. Brem and Dr. F. S. Dillingham.

Wednesday evening the men of the society were entertained by a smoker at the Oakland Club, of which Dr. Fitch C. E. Mattison, chairman of committee of arrangements, is president. While the smoker was being enjoyed a theater party under the hostage of Dr. Arthur T. Newcombe was entertaining the ladies.

Thursday morning Pasadena delegation turned out in full force and style with seventeen autos to entertain us with a couple of hours' ride about beautiful Pasadena.

There were about 100 in attendance. A lively discussion followed each paper, resulting in a very profitable meeting.

The next place of meeting will be in Los Angeles in December.

A vote of thanks was tendered to the committee and the society adjourned to meet in Los Angeles in December.

Committee on Arrangements—Fitch C. E. Mattison, M.D., chairman; Arthur T. Newcomb, M.D.; Henry H. Sherk, M.D.; W. H. Roberts, M.D.; Thos. J. Orbison, M.D.

BOOK REVIEWS

DUODENAL ULCER. Second edition, enlarged. By B. G. A. Moynihan, M.S., (London), F.R.C.S., Senior Assistant Surgeon at Leeds General Infirmary, England. Octavo of 486 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1912. Cloth, \$5.00 net; half morocco, \$6.50 net.

The first edition of this work is so well known that it will suffice for us to note the changes introduced in the second edition. It is rare that a book becomes such a standard work upon the appearance of the first edition. The changes in the second edition have to do chiefly with the differential diagnosis of duodenal ulcer and the result

of x-ray examinations of the stomach after the administration of bismuth.

During the last two years Moynihan's cases have been examined by x-rays after the administration of a meal of bismuth, with milk, or bread and milk. When more than three ounces of bismuth are used, the large quantity may cause the stomach to empty itself rather slowly, especially when the patient is kept in the recumbent posture. When stasis is present, the meal leaves the stomach very slowly, so that in severe cases a

shadow may be seen at the end of 18 to 24 hours.

PELLAGRA. By George M. Niles, M.D., Professor of Gastro-enterology and Therapeutics in the Atlanta School of Medicine, Atlanta, Georgia. Octavo of 253 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1912. Cloth, \$3.00 net.

This work does not pretend to be the final word, but it is a good book upon a timely subject. Pellagra is defined as an endemic malady, characterized by an erythema (generally symmetric) upon the exposed surfaces of the body, by gastro-intestinal disturbances, and by nervous and psychic phenomena. The following are some of the synonyms: Alpine scurvy, Asturian leprosy, Austrian rose, Disease of the Landes, Maidismus, Psycho-neurosis Maidica, Mal de la Rosa, Mal del Sole, Mal de Misere, Mal del Padrone.

In this country, pellagra has been reported in 34 states and the District of Columbia. California has reported seven cases, which is probably only a small fraction of the cases that have occurred in this state.

The chapter on etiology is closed with a reiteration of Lombroso's theory: In pellagra, then, we are dealing with an intoxication produced by poisons developed in spoiled corn through the action of certain micro-organisms in themselves harmless to man.

In diagnosis, the symptoms may be divided into gastro-intestinal, dermal, nervous and psychic. It is an open question whether there is a pellagra sine pellagra.

TUMORS OF THE JAWS. By Charles L. Scudder, M.D., Surgeon to the Massachusetts General Hospital. Octavo of 391 pages, with 353 illustrations, 6 in colors. Philadelphia and London: W. B. Saunders Company, 1912. Cloth, \$6.00 net; half morocco, \$7.50 net.

It is true of jaw growths, as of gastric diseases, that terminal conditions

of malignancy are easy to recognize—early malignant diseases are difficult to diagnosticate. The terminal conditions of cancer and sarcoma have a high operative mortality; early malignant disease has a low operative mortality. Sarcoma and carcinoma of the jaws are curable if recognized and treated early, but they are most malignant and incurable if operative treatment is delayed. Operation should depend largely upon the character of the tumor. A mutilating operation should not be done for a relative benign form of malignant growth. On the other hand, a very thorough and much more extensive operation is demanded for the malignant growths than has been practiced in the past. The surgeon should study to cure each case of jaw tumor with the least mutilation possible. The tendency of malignant disease of the jaws is to grow into the accessory sinuses of the face and toward the base of the skull. An intimate knowledge, therefore, of the anatomy of these sinuses is necessary to the operating surgeon. The volume contains numerous illustrations of the various sinuses, that may prove helpful to the operator. A thorough study of the clinical material at the Massachusetts General Hospital forms the basis of the monograph.

Epulis is described as a border-line tumor, lying midway between inflammation on the one hand and a neoplasm on the other. When looked upon as a neoplasm, it is still a border-line lesion between the benign and the malignant connective-tissue tumors. Epulis appears in order of frequency near the canine, the bicuspid, the first molars, and the incisors. It almost never appears behind or fastened to the root of the last molar.

Sarcoma is quite common in children, but sarcoma of the jaws is extremely rare in childhood. In childhood, the

cases have usually occurred between six and fourteen years of age. In the upper jaw, sarcoma occupies most commonly the body and alveolar process. The hard palate and frontal process are least often involved. In the lower jaw, the body and alveolar process are alike involved. The periosteal spindle—and round-cell sarcoma more often starts near the angle of the jaw and extends toward the ramus and about it. Epithelioma invades the alveolar process most commonly. The less malignant periosteal osteosarcoma starts on the body of the lower jaw more often than on the alveolar border or the ramus. The etiologic importance of a single isolated trauma in connection with sarcoma is more nearly settled than has been generally supposed. A suspicion of malignancy in the early stages of sarcoma of the jaw may be entertained, but a positive diagnosis then is most difficult. Sarcoma should be differentiated especially from empyema of the antrum, nasal polypi, alveolar periostitis, odontomata, dental cysts, osteomata, gummata and carcinoma.

Fibroma occurs alike in the upper and lower jaw, and is clinically benign. They are most common in middle life, during the third decade, though they have been seen during the second and fourth decade, and a case has been reported in a new-born child. The symptoms are those due to pressure of the growth.

Chondroma may be benign or malignant, the latter containing sarcomatous

elements. They occur usually under twenty-five years of age. The starting-point is most frequently from the alveolar margin; next, from the bones of the face near the orbit, vault, and from the palatine or orbital plates of the superior maxilla.

Odontomata are tumors of the jaw arising from a portion of a tooth's follicle. The following varieties are of surgical importance: 1, the dental root-cyst; 2, the follicular or dentigerous cyst; 3, the compound or composites folliculareyst; 4, the adamantin epithelioma, and 5, the hard odontoma.

Carcinoma is more frequent in the upper and lower jaws than sarcoma. About three cases of carcinoma occur to two of sarcoma. All carcinomata of the jaw start in tissues outside the bone and invade the jaw secondarily. The central carcinoma of the upper jaw, starts usually in the mucous membrane of the antrum of Highmore. Central carcinoma of the lower jaw, without involvement of the mucous membrane of the gum, is unknown. The cancer of the upper jaw which is most common, starts not centrally but from the mucous membrane of the cheek and nose. It is not uncommon to find the history of nasal polypi having been removed, possibly several times removed, and that subsequently malignant disease of the nose and jaw appeared. In such cases, the polypi are probably really secondary to the malignancy.

THERAPEUTICAL HINTS

A NEW THYROID PREPARATION.

To Dr. S. P. Beebe, Ph. D., Professor of Experimental Therapeutics in Cornell University Medical School, the profession is indebted for a new and valuable preparation of the active prin-

ciple of the thyroid gland. It is a carefully standardized product, consisting of certain proteids of normal glands, extracted, purified and adjusted to a content of 0.33 per cent. of iodine. Its preparation has been entrusted to

Messrs. Parke, Davis & Co., and the product is offered to the medical profession under the name of Thyroprotein (Beebe).

The selection of normal glands for use in making Thyroprotein, it may be noted, is a very important matter. Heretofore the glands of sheep have been used in medicine, and it is now known that sheep from certain parts of the country always have goitrous glands which are rich in content of proteid of the thyroglobulin type but contain very little iodine. This fact alone accounts for much of the variation noted in thyroid therapy. Furthermore, the thyroid gland as a whole contains certain substances which appear to be not only useless but actually harmful. In the preparation of Thyroprotein these objectionable substances are rejected.

For therapeutic administration the proteid (thyroprotein) is diluted with milk sugar and made into tablets, each of which weighs exactly two grains. These tablets are supplied in three strengths, containing, respectively, 1 per cent., 2 per cent. and 5 per cent. (of 2 grains) of the active medicament. The 1-per-cent. and 2-per-cent. tablets are used almost entirely in the treatment of goitre. The stronger (5-per-cent.) tablets are employed in metabolic disorders, as skin lesions, joint affections, myxedema, cretinism, or other conditions in which there is markedly deficient thyroid activity.

Physicians who are desirous of learning more of this new thyroid preparation will do well to send a request to the manufacturers, Parke, Davis & Co., at their home offices in Detroit or any of their branch houses, for their new booklet descriptive of the product. It bears the title "Thyroid Therapy" and contains a lot of useful information.

A VALUABLE TONIC IN CHILDHOOD.

It is a fact that cannot fail to interest the practitioner that one of the most useful and valuable remedies in childhood is Gray's Glycerine Tonic Comp. The reason for this is quickly found in its palatability, freedom from contra-indications and pronounced efficacy in the diseases common to childhood. Even the littlest children will take Gray's Glycerine Tonic Comp. without objection and no matter how run down and debilitated a child may be, this eligible remedy can be freely administered with no other than the most beneficial effect on the stomach and other digestive organs.

While broadly indicated in all forms of malnutrition and inanition it is in convalescence from measles, scarlet fever, pneumonia, acute bronchitis and other affections that it accomplishes its most conspicuous benefits. Gray's Glycerine Tonic Comp. restores the appetite, stimulates digestion, promotes assimilation and quickly places the patient on the highway of health and bodily vigor. Finally, one of the great advantages of this exceedingly useful remedy is that it can always be relied upon to do all that cod liver oil can, with none of its objectionable or disagreeable features.

OUR PLATFORM ON THE ADVERTISING QUESTION

We long ago stated our position upon this subject. In 1906 we printed the advertising platform which follows, and which for many months was carried at the head of our advertising department. While the detail has varied from time to time since, we have endeavored to adhere continuously and consistently to the principles here laid down:

"1. Remedies advertised to the laity will not be admitted; this rule,

of course, not excluding food preparations, soaps, harmless cosmetics, simple laxatives, ointments, and other substances not intended primarily for the treatment of disease.

"2. Palpable falsehood, purposely misleading or grossly exaggerated statements concerning the composition or alleged virtues of a remedy will be considered sufficient cause for the exclusion of advertising.

"3. The names of the essential remedies of therapeutic value entering into any compound, and the quantities of any toxic or habit-forming drugs must either be given by the advertisement, or the advertiser must agree to furnish them to any physician upon request." (To this we now would add that the quantities of every potent constituent in a combination should be given, that the physician should know exactly what he is giving, so that he may know exactly what to expect.

To these rules we adhere today, and we take this opportunity to reiterate them. We stand with the best in the fight for better drugs, truer drugs, a cleaner and more effective *materia medica*. Our fight for the active principles seems to be proof enough of our position. But we also stand for a campaign that is first of all **constructive**, and which in its zeal does not go to the extent of destroying that which is good or of handicapping or abusing those who are honestly endeavoring to give the medical profession honorable, helpful service.—The American Journal of Clinical Medicine, May, 1912.

LINK THE PAST WITH THE PRESENT.

J. Marion Sims many years ago said, "For severe Dysmenorrhea I have found Hayden's Viburnum Compound of great service."

What was true as to the therapeutic value of Hayden's Viburnum Compound in the time of Sims is just as

much of a fact to-day. As a remedy in the treatment of Dysmenorrhea, Amenorrhea and other functional irregularities of the uterus and its appendages, H. V. C. is dependable in action, and as it is of known composition and contains no narcotics it is safe to prescribe.

As a uterine tonic and antispasmodic it is of particular service, and to any physician who desires to clinically demonstrate its therapeutic action samples and literature will be forwarded upon request to New York Pharmaceutical Co., Bedford Springs, Bedford, Mass.

SYPHILITIC CACHEXIA.

In the cachexia of syphilis, particularly during the late months of the disease, Cord. Ext. Ol. Morrhuæ Comp. (Hagee) has proven of much value, and is employed for this purpose in a routine manner by many physicians. Its therapeutic power as a reconstructive in syphilitic cachexia rests upon its well known property of improving bodily nutrition. Cord. Ext. Ol. Morrhuæ Comp. (Hagee) is a blood-maker of high order, a feature that makes it of particular value in syphilitic debility. Its employment will be of much aid to the usually resorted to therapy of syphilis and gratifying results will be noted from its administration.

THE MANAGEMENT OF CONVALESCENCE.

The systematic use of Gray's Glycerine Tonic Comp. following pneumonia, acute bronchitis, La Grippe, typhoid fever, the exanthemata and other acute affections, gives such material aid to the restorative and recuperative processes of the body that the convalescent period is not only greatly shortened, but it is freed from practically all of its danger and uncertainty. Normal physiologic activity of all vital functions is promptly established and with these working in harmony recov-

ery from acute disease is usually perfect and complete. Gray's Glycerine Tonic Comp. by reason therefore of its proven value as a restorative is probably more often used for promoting convalescence than any other remedy. Its certainty of action, the positive benefits produced, and its freedom from any unpleasant effect no matter how weakened the patient may be, leave little reason for questioning the preference now so generally shown this dependable remedy. That it serves a purpose in convalescence so far reaching and important, and serves it so well, is all the justification needed for its invariable use just as soon as the fury of a pathologic storm has passed and the reconstructive or convalescent period begins.

"TREATMENT OF SURGICAL
TUBERCULOSIS BY
DIORADIN."

Dr. R. Atkinson Stoney, Visiting Surgeon to the Royal City of Dublin Hospital, in an article on the "Treatment of Surgical Tuberculosis by Dioradin" (*Medical Press and Circular*, March 27, 1912) gives his results in fifteen cases of surgical tuberculosis treated with this remedy at the Royal City of Dublin Hospital. The paper was first read before the Section of Surgery of the Royal Academy of Medicine in Ireland.

Dr. Stoney gives a complete and thorough report of the 15 cases treated and states that his "results are decidedly good, and certainly better than any he has ever obtained by the use of tuberculin in any of its many forms."

The cases treated were very severe and we give here merely the final results obtained:

"Case 1 is apparently perfectly well after her second course of injections.

"Case 2 has had second course. The

urine has been found normal on several occasions; patient can retain urine for about six hours, has only occasional momentary pain at intervals of a fortnight, and has gained nearly seven pounds in weight. The glands in the neck have become much smaller.

"Case 3 is in much the same condition; a fresh abscess collected and had to be opened; is now starting on his third course.

"Case 4. Condition much the same at the end of the second course.

"Case 5. Not heard from since leaving hospital, practically cured.

"Case 6 has had second course and now has no pain, moves easily, very little swelling, and increase of another seven pounds in weight.

"Case 7 returned to the hospital. All sinuses are healed except the submaxillary, from which a requestum of the lower jaw was removed recently. Has increased in weight since second course of injections.

"Case 8. Left hospital for Workhouses Infirmary in same condition—(no definite improvement).

"Case 9. After second course of injections was put in plaster and sent out on crutches.

"Case 10. Was put in plaster and sent out on crutches, but has not returned to hospital since for second course.

"Case 11. Not much change after second course except a further gain in weight.

"Case 12. Dead.

"Case 13. Second course caused further improvement.

"Case 14. Has not returned.

"Case 15. Except for some loss in weight, not much change after second course of injections."

In the round table of the Medical Standard for May there is an interesting discussion of aconite, in which

are incorporated communications or statements of a number of prominent men of the day regarding their use of this drug.

THE TREATMENT OF NERVOUS DISORDERS.

Valuable as are rest and dietetic regulation in the treatment of nervous disorders, it is generally recognized that effective tonics are always necessary. For instance, in chorea and the restorative stage of poliomyelitis, it is often surprising to note the remarkable impetus given to convalescence by the use of Gray's Glycerine Tonic Comp. Its administration promptly stimulates the appetite, aids digestion, and so improves the whole nutrition that recovery is substantially furthered and hastened. The same thing holds true in neurasthenia, and the benefit that almost always follows the use of this remedy is invariably as gratifying to the practitioner as it is to the patient.

The May issue of Therapeutic Notes, published by Parke, Davis & Company, is especially good. Possibly this is due to the proximity of the time of meet-

Svapnia

**Purified Opium
With a Fixed
Morphine Standard**

SVAPNIA possesses the following advantages over ordinary opium:

Freedom from mechanical impurities; elimination of undesirable alkaloids; definite morphine content (10 per cent); lessened tendency to nausea and vomiting; increased palatability; uniform results.

The adult dose of Svapnia (1 to 2 gr.), as well as the indications for its use, are the same as opium. It is in the form of red-brown scales, soluble in water with turbidity, and is best administered in capsules, pills or powder form.

Sold by druggists generally.
THE CHARLES N. CRITTENTON CO.
Sole Distributing Agents,
115 Fulton Street, New York.
Sample and literature on application.

ing of the various national medical societies.

CALIFORNIA HOSPITAL ALUMNAE NOTES

The regular monthly meeting of the Association was held Friday, May 24th, at the directory rooms, 1103 W. 8th St. The president being absent, the meeting was called to order by Miss Arnold, 2nd V.-P. Mrs. Durbin was appointed Sec'y pro tem. The following nurses were elected to membership: Cloe La Bire, Ethel B. Green, Mrs. Cushing, Mrs. Coulter, Jessie W. Smythe, Edith Henderson, Lucy Russell, Fannie Gooden, Miss Peek. It was voted that our Alumnae Association protest as a body against the adoption of the old bill for State Registration

and that we demand the drafting of a new bill which will more nearly meet the requirements of the present time.

After the final arrangements had been made for the Annual Reunion the meeting was adjourned and refreshments were served by Miss Middleton.

So many things have been on the program this past month that the class of 1912 has hardly had time to get them all in. Never has any class been so entertained as this one. But why shouldn't it be so? There are thirty-four of them—the largest ever graduated. First, Dr. Lindley entertained

with a trolley trip and banquet at the State School at Whittier; next the Juniors entertained by giving a theatre party at the Orpheum, followed by a dinner at Hotel Hayward. Place cards were found at each place which in one corner had the class pin for 1912 and in the other for 1913 painted by one of the '13 class. The favors were small dolls dressed in the hospital uniform. Tied to the arm of each doll was an empty hypodermic tube containing a "special order" slip on which was written the future of each nurse. After the singing of the class songs and music by the orchestra, etc., it was time for the seventy-one nurses to wend their way Hospitalward.

Third came the long-looked-for Commencement night. The exercises were held in the Gamut Club House. There were addresses by Dr. Walter Lindley, Dr. C. W. Pierce and Mrs. Seward Simonds. Amid music and flowers and congratulations the members of the class received their much coveted diplomas. Then came the dancing, at which Dr. J. J. O'Brien officiated as master of ceremonies, and ice cream and cake and a jolly time generally.

The last thing of all was the Annual Reunion of the Alumnae Association, at which the members of the class of 1912 were the guests of honor. On Tuesday, May 28th, it was arranged for all to meet at the P. E. depot at 6:30 en route to Casa Verdugo. It was quite evident the nurses were out for a good time from the very first, and they made quite an imposing army as they marched from the cars, nearly seventy strong, around the corner to the old Casa Verdugo, where the tables were set in the picturesque arbor. It was a glorious, warm, moonlight night and amid the tropical gardens and red and yellow lights it made a picture not easily forgotten. In the center of each table was a great bouquet of fine white

flowers and forget-me-nots, the hospital colors being blue and white. The place cards were tied with blue and white and the favors were small tamales tied with orange and red, in which were found amusing quotations. Surely Senora Sowl outdid herself that night, for never were more delicious Spanish viands with more unpronounceable names thought of or served. From first to last everything was beautiful and poetic. During the repast the De Nublia Bros. rendered the most exquisite music on harp and violin. Senorita Sowl, who has a most delightful voice, sang many of the romantic Spanish songs while her very small brother danced. The grounds, the house and patio were all thrown open and together with the moonlight and music, the scent of the flowers, and the dancing made a picture in the mind which will be calling us back. Miss Kent, president of the Association, gave the welcome address to the class and Miss Beard, class president, responded. Miss Williamson also gave a short talk. The Alumnae wish to extend its thanks to Dr. C. W. Cook for the candy which he donated for the occasion and to Mrs. Middleton for the beautiful flowers sent.

Miss Margaret Waller has just passed through an operation for appendicitis in San Francisco. We are very glad to learn she is rapidly recovering.

Miss Nagel, who has been in the Black Hill country, S. D., for about two years, has returned to this city. She received a royal welcome from her host of friends.

Mrs. McCulloch, née Alice Todd, '04, is visiting in this city. She may come here to reside shortly.

We are very glad to have Mrs. Marie Robinson-Johnson back with us after many months' illness.

Miss Claire Hardison is having a vacation in the Santa Paula country.

"the basic value of a remedy is the result which it produces.



Laboratory demonstrations may prove the purity, or the component parts of a product but by therapeutic application and clinical observation must its true value as a remedy be determined.

Upon the basis of clinical manifestation of dependable uniformity, the value of antiphlogistine has been established and most generously acknowledged by its extensive employment.

In inflammatory and congestive conditions, antiphlogistine has proven of particular service and as a seasonable suggestion, its application thick and hot, well protected by suitable covering, to sprains, strained or stiffened tendons so prevalent during vacation time, will afford the patient relief from pain and an early use of the part."

Miss Kitty Anderson left recently with friends from Seattle for an extended trip through the Eastern States and Europe.

Miss Allen is in Berkeley, where she is taking some special course in the summer school.

Miss Gibbs has been in Nordhoff for some time. She expects to remain there till August.

Miss Kent recently went to Arizona for a short trip to see her father, who was ill.

Mrs. Ensign has returned from Jerome, Arizona, where she has had a hospital position.

Miss Shaw has accepted a position in Dr. A. C. Thorpe's offices.

Miss Hilda Humphries, who was elected as a delegate from the Alumnae Association to the National Associated Alumnae in Chicago, left for that city May 28th. She will visit all the large eastern cities before returning.

Wood Waste Magazine

A handsomely illustrated monthly. Largest circulation of any scientific utilizing waste for profit by distillation magazine. Terms: 50 cents a year; 6 cents a copy. Advertising rate, \$1.00 per inch flat.

Address **Wood Waste Distilleries Co., Inc.**
Wheeling, W. Va., U. S. A.

Mr. and Mrs. Kreiter, nee Josephine Boyer, were made happy by the arrival of a small daughter May 23rd.

Miss Lillian Simpson, who has been staying in Santa Barbara for a couple of months, ran down to this city last week for a few days.

Miss Williamson, superintendent of the Hospital Training School, left Friday for Chicago, where she will attend the National Convention. On her return trip she will stop in San Francisco, where she will attend the State Convention. We expect her to be so full of new ideas when she returns that we will only have to look at her to learn a lot.

UTILIZING WASTE FOR PROFIT

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POLIOMYELITIS AND POLIOENCEPHALITIS.

BY ROSS MOORE, A.B., M.D., ASSISTANT PROFESSOR OF NERVOUS AND MENTAL DISEASES, MEDICAL DEPARTMENT, UNIVERSITY OF CALIFORNIA.

At the present writing (July 5th, 1912) there are registered in the Los Angeles City Health Office thirty-three cases of "infantile paralysis." All of these cases have occurred within the last forty days.

This probably means that we are to have more or less of an epidemic of this disease this summer.

Already a number of different forms of the affection have appeared and the cases are uniformly severe. Some fatal cases have been reported.

The cases seen by the writer during the last month have been so varied in character as possibly to warrant a brief report of the more interesting of them at this time.

Case 1. Boy of ten, seen with Dr. Rooney of Los Angeles. Four days before the beginning of this illness fell over a fence and struck on shoulders. Not much hurt. First symptoms: a general feeling of being tired and feeling sick. Some pain in neck and head the second day. On fourth day left arm became weak, sixth day right arm painful and slightly weak. During all this time a "typhoid" appearance.

From sixth day on to the present (eleventh day) continues sick and tired with a good deal of brachial plexus pain and some headache. Reflexes retained. No sensory loss.

Diagnosis: Poliomyelitis with accompanying slight meningitis.

Case 2. Baby two years old seen with Dr. Anton of Los Angeles. Brought to office with history of indefinite gastro-intestinal symptoms for ten days. Twenty-four hours after first visit right arm helpless and marked difficulty in swallowing. In two days both arms affected and marked retraction of head giving general appearance of meningitis, but without rigidity of the extremities. Lumbar puncture at this time showed normal pressure and clear fluid. These meningitis symptoms lasted three or four days. When they disappeared the patient was apparently blind. In ten days the sight had returned and the ability to swallow as well. At present, two or three weeks after the onset of the definite symptoms, the little patient is weak in all four extremities and has some little temperature at times during the day. No pain. No sensory loss. Reflexes present at time of all examinations.

Diagnosis: Poliomyelitis with accompanying meningitis.

Case 3. Girl of five years, seen with Dr. Yost of Los Angeles. Began with what seemed to be an attack of acute indigestion. There was no reason to change the diagnosis from the latter for two days. On the third day a lack of proper power in the lower extremities began to manifest itself. During three days this loss of power slowly advanced upward, first becoming complete in the legs, then attacking the arms, then the neck muscles, and finally producing bulbar symptoms. For twelve hours before death the little patient was cyanosed practically all the time and alternated between spells of normal breathing and apnea, during the latter of which the facial and throat movements of forced breathing were made with absolutely no thoracic movement at the same time. She would seem one minute to be making the very last movements of expiring life and the next minute the breathing would be entirely normal. At all times the consciousness seemed to be preserved even to the very end. There was little fever and practically no pain except that of the first two days.

Diagnosis: Acute ascending poliomyelitis. (Compare Landry's paralysis.)

Case 4. Two year old boy seen with Dr. Yost. During the last four weeks this child has had several spells of limping or rather clumsiness in his feet. These spells lasted a few hours and cleared up without leaving any traces behind. At no time before, during or after the spells was there fever or, in fact, any evidence of constitutional disturbance in the case. At the present time he is quite well.

This case is included with the others because no diagnosis has been made which is at all satisfactory. It may be an abortive poliomyelitis.

Treatment of the acute disease has consisted in the giving of rather large doses of hexamethylamin tetramine and other symptomatic measures. Electricity and strychnia are used for the later stages.

705 Fay Bldg., Los Angeles.

CLOSED FRACTURES OF THE FEMUR, INCLUDING THE NECK OF THE BONE.

BY ETHAN H. SMITH, M.D., PROFESSOR OF ORTHOPEDIC AND CLINICAL SURGERY, AND DEAN OF THE MEDICAL FACULTY, COLLEGE OF PHYSICIANS AND SURGEONS, SAN FRANCISCO.

In no class of fractures have we perhaps seen more difference in opinion as to how these fractures should be treated, and in no fracture of any other bone is there so much variance of opinion as to what constitutes a "good result."

It will be unnecessary, for the purpose of this article, to go into a description of the various types of fracture which we may encounter. We will drop the matter of diagnosis, causes of fracture, whether transverse, oblique, spiral, longitudinal, comminuted, impacted or otherwise, and take up the matter of treatment. The first requisite, whether in the home or any hospital, is the bed. The most essential feature of a bed is, that, aside from having a reasonably good mattress,

which, in itself, is in good condition, not full of humps and hollows, but a fit mattress in every regard on which to lie, it must also be on a plain surface. A woven wire spring bed underneath the mattress is always an evil, because it sags down in the middle like a hammock. In the event of having such a spring mattress, it must be so supported by boards pushed underneath the spring and over the side rails of the bed as to convert it into a horizontal plane.

Next, a good quality of moleskin adhesive plaster must be provided. The ordinary molsekin adhesive plasters contain too much pitch, and are irritating to the skin, and are positively a damage and cannot be used. Shiver's moleskin plaster, made

by Schieffelin & Co. is a plaster which will not irritate the skin. It is spread on a good quality of felt, and answers the purpose well.

It is not the purpose of the writer to boom or advertise any one's product, but without a good quality of moleskin adhesive plaster, we cannot apply this treatment or any other method requiring an adhesive plaster with success. Two strips of plaster, each wider at the upper portion than at the foot, are cut, the edges of the plaster nicked so that it may be applied smoothly to the leg and thigh, avoiding all wrinkles. A wrinkle means a sore. The plaster must not be heated over a lamp or by other artificial means, but is applied directly to the skin, up to the line of fracture, no higher. A gauze bandage is then snugly applied over the plaster, and friction made with the hand over the gauze bandage, thus generating enough warmth to cause the plaster to adhere to the skin. The gauze bandage is then removed, and a flannelette bandage smoothly and carefully applied from the toes to the upper point of termination of the adhesive plaster. The moleskin plaster must be long enough to extend four inches below the sole of the foot, and also to be reversed upon itself, so as to cover the sticky face of the plaster on the inner side to above maleoli. This prevents the sticky surface from adhering to the bandage on the side of the ankle and foot. A cross piece or spreader is then made, 6" in length, to button into the plaster below the sole of the foot. This cross piece should be two-pronged, because if buttoned in to one button hole in each lower end of the plaster, it will cause the plaster to wrinkle over either side of the ankle, and each wrinkle will make a sore. The spreader should be 2" in width, and with two prongs on each end, buttoning into two separate holes in each strip of plaster, keeps the plaster spread so as not to wrinkle, and

by being 6" in length, separates the ends of the plaster, so as to avoid undue pressure on the maleoli. The plaster must be shaped with scissors over the lower third of the leg, narrowing the plaster at this point so as to avoid wrinkles.

Two sandbags are then applied. The sandbags, when filled, must be, for an adult, at least 6" in diameter, the inner one long enough to extend from the perineum to the sole of the foot, the outer one long enough to extend from the level of the eighth rib to the sole of the foot. These bags must not be too compactly filled, but so that they may be adapted to the shape of the normal thigh and leg.

After placing the patient in bed, by making traction on the extremity, the broken fragments are adjusted. Pieces of absorbent cotton are placed over the bony prominences of the thigh and leg with special care to pad over the great trochanter and on either side of the knee. The sandbags are then laid in the bed, the foot is brought into proper line with the whole extremity to avoid rotary displacement, in case of fracture of the shaft only, and then the sandbags are tied with strips of bandage which shall include both sandbags and the thigh and leg; placing one strip about 3" above the ankle, another just below the knee, one above the knee, and one above the site of the fracture in the shaft. The upper end of the outer sandbag is secured to the side by a broad binder, which will keep it closely against the hip, but not roll up, so as to be a source of irritation to the opposite side of the body. In case of fracture of the neck of femur, the foot must be rotated inward as much as possible, the upper portion of the outer sandbag crowded in behind the great trochanter, which, by the fingers of the surgeon, is rotated forward, and the sandbag thus secured. A weight, in the adult patient, of from 10 to 15 pounds is

then attached to the spreader below the foot, running over a pulley attached to the foot of the bed. The heel must be raised from the mattress by a soft pad, so that under no circumstances shall the heel itself rest on the mattress. The cord attached to the weight must be so adjusted over the pulley as to pull in the direct axis of the extremity. It must not pull downward or upward from this direct line, so as to cause wrinkles in the adhesive plaster. This simple device is applicable to all closed fractures of the femur, whether of the neck or of the shaft of the bone.

In fractures of the neck of the bone, the thigh must be neither adducted nor abducted, but placed in the direct line, and the whole extremity rotated strongly inward. By this means the fracture may be kept in perfect position. The sandbags serve as a better splint to keep the bone in perfect line in fractures of the shaft of the bone than by any other method, and in fractures at the juncture of the middle and upper third of the shaft of the bone there will be no difficulty in keeping the fragments in proper alignment, if the bed is on a horizontal plane.

The tilting of the upper fragment upward is due to the sagging of the mattress, allowing the buttocks to sag below the common level of the mattress. Raise the buttocks to the level of the thigh and this will be overcome. With the traction of the weight, the attachment of the adductor muscles will pull the fragments into line.

In case of fracture of the neck of the femur, the tendency is for the extremity to rotate outward, separating the neck fragment from the trochanter. The fragments are brought into apposition by rotating the extremity inward and the weight will maintain the normal length of the extremity. This method has the advantage of enabling the surgeon to see when the fracture is perfectly adjusted, without neces-

sarily having to disturb it. Adjustment may be made from day to day as may be required.

In case of an elderly patient, the patient's body may be elevated on pillows and lowered several times daily, thus relieving congestion of the lungs.

In the case of emaciated patients, or very corpulent people, a rubber air cushion moderately filled, should be placed under the patient at once. Over the sacral region the parts may be sponged with alcohol, dried and powdered, twice daily, without material interference with the fracture, in this way avoiding bed sores. It is unnecessary to place the patient on a bed pan. The inner sandbag can, by untying the strips of bandage, be slipped downward, and a goodly sized pus basin slipped under the buttocks, for evacuation of the bowels. A urinal may be used without materially disturbing the patient at any time. No other method gives the surgeon so complete control of fractures of this sort, and fractures of the neck of the femur recover just as well as do those of the shaft.

In case of fracture of the neck of the femur, the dressings must be kept in place for three months, and the patient not permitted to walk without crutches for five months.

This article is not based on the experience of one or two cases, but on the result of a large series of cases, extending over more than twenty years.

By carefully following the method advised, it will be found unnecessary to treat closed fractures of the femur, whether of the shaft or of the neck by the open method.

Many compound fractures may also be treated with entire success by this method.

Coaptation splints are a positive detriment and plaster of paris inadequate and a disappointment in recent fractures of the sort described.

701 Phelan Building.

EPIDEMIC SORE THROAT.*

BY DR. HILL HASTINGS, LOS ANGELES, CAL.

Two years ago the peculiar form of sore throat, now under discussion throughout the United States, came to my notice. In eight years practice in Southern California I had not met with cases of this character. At the time I talked with many of the older men of our profession in this section and came to the conclusion that we had to deal with a different sort of tourist than had heretofore visited us from the infectious East,—or else that our visiting infection was an old enemy disguised by peculiar characteristics.

The syndrome of signs and symptoms that made what seemed to be a unique infection is briefly as follows:—Sudden onset of sore throat, which in itself seems mild, followed by rapid enlargement of the cervical lymphatic glands, high temperature, and considerable prostration, with a tendency to serious complications through the spread of the infectious organisms. The throat examinations in most of the cases I have seen showed signs of a mild inflammation of the faucial region, without much and frequently without any distinct membrane. The tonsils are usually swollen and red. At times, peri-tonsillar infiltration is present. In some cases this peri-tonsillar swelling has caused a diagnosis of quinsy. In two consultation cases (one a baby 8 months old) there had been an attempt to find pus by the usual incision for peritonsillar abscess. In some cases the tonsil follicles show exudate, but it is noteworthy that this appearance is frequently absent, and when present it is decidedly different from that usually seen in follicular tonsillitis. A phlegmon in the tissues of the neck (perilymphadenitis,) is rare, but occasionally occurs. In one of my patients—

the baby above referred to—this occurred and resulted in odema of the larynx, which required quick tracheotomy to save the patient's life. As a rule the throat signs have been, in my experience, slight, whereas the glandular swelling, or a complication of middle ear infection, with ear discharge, have been the predominating signs that seemed to explain the high temperature. In several cases in my observation, the complicating ear discharge, with the possibility of the existence of mastoiditis and jugular thrombosis, has prompted the consultation. Nearly all of the cases I have seen have been in children. In one community, the infection spread through the children of a private school. This school is situated some distance from one of our small inland towns, in unusually healthful surroundings. The wife of the principal of the school described the infection to me in April, 1910, in a way that showed keen observation and considerable thoughtfulness. She said that all four of her children were taken sick in the early part of the winter with mild sore throat; the throats did not seem bad, but the glandular swelling and high fever caused considerable alarm. Other cases developed and they began to feel that a new disease had been introduced in their community. Such was their interest that they even fixed on an incubation period, which they placed at ten days.

In the Childrens' Hospital, in Los Angeles, during the early part of 1910, when the epidemic seemed to be at its height in this community, there were ten cases under my care, three of them being nurses. Two children died,—both from pneumonia. Dr. C. C.

*Read at the meeting of the Southern California Medical Society, Pasadena, May 1st, 1912.

Warden's report of the bacteriological findings, from aspiration of the glands during life, as well as from examination of the infected glands removed at autopsy, is as follows:

"Each of these three children had enlarged cervical glands, chiefly in the sub-maxillary region.

Percy. The large rather dense gland in the left submaxillary region was aspirated aseptically. Nothing was obtained except a little blood serum. From this smears and cultures were made. The smears showed a single type of organism, encapsulated, diplococcal, lanceolate in shape, gram positive in staining reaction. Cultures were made in broth, agar, ascitic fluid and inspissated blood serum. Cultures were obtained on ascitic fluid and blood serum, which, on culture or blood agar, showed a characteristic growth of pneumococci.

Subsequently this gland broke down, was incised, and in the pus from the gland were found, in smears, organisms corresponding to those obtained from aspiration.

At autopsy, a portion of the gland and brawny sub-maxillary tissue was removed and sections made in the usual method. In these were observed large numbers of Gram-positive lanceolate diplococci, conforming to the pneumococcus. (Rosenow, of Chicago, has recently found the infection in similar cases to be the streptococcus capsulatus, which he says is easily mistaken for the pneumococcus).

Thelma: Similar glands in the neck were aspirated by the methods above described and pneumococci were isolated.

Tony: A similar procedure was carried out in the case of Tony, and from autopsy tissues from the sub-maxillary region were sectioned. These sections show the same organism above mentioned."

These are the only fatal cases I have seen or heard of in this community. I hope that the discussion before this society will bring out reports from other observers in this section, not only of any fatal cases they may have seen, but also cases presenting serious complications. In addition to the fatal cases above referred to I should

like to report two cases in which serious complications occurred:

Baby C. 8½ mos. old, seen May 18, 1910, on account of fever and enlarged glands of the neck. History dates back two or three weeks. Began with enlargement of the glands on the left side of the neck, fever and some constitutional disturbance. Physician called at that time. Throat examination negative. Swelling left side subsided and the present swelling of the right side began.

Child has been somewhat choked up but no shortness of breath; some difficulty in nursing. Examination showed considerable enlargement of the glands of the right side of the neck, considerable infiltration around the gland.

Throat examination showed some swelling of the fauces of the right side (not of a quinsy type) and apparently due to the cervical condition. Tonsil region was incised two days ago. I was told no pus was found. Parents desired to avoid external operation. Fauces swelling again incised and no pus. No evidence of diseased tonsil, nor of membrane in the throat. Temp. 101—condition good. May 19, condition unchanged. The following day the patient was somewhat worse; for three or four hours breathing had been a little obstructed but no apnoea. Some mucus from the throat, but no pus. During the examination of the throat by myself, in the presence of the family physicians, Dr. Johnson and Dr. Robinson, the child suddenly choked and stopped breathing,—the finger had not been put into the larynx. I believed at the time that some mucus had caused the choking. Child's head was lowered and the finger put against the epiglottis in order to excite coughing and breathing; failed. Child was rapidly growing worse; carried to the window, head down, artificial respiration started without success. Child stopped breathing, apparently dead.

Several minutes had elapsed since the onset of the choking, for at first the serious nature of the condition was not suspected. Immediate tracheotomy was done. Fortunately a knife and artery clamp were at hand. Tracheal wound held open with clamp, artificial respiration kept up for a number of seconds before breathing began. Consciousness restored. A tracheal tube was obtained and inserted. On the second day the nurse said that some

creamy pus came out of the child's mouth. Examination failed to show any pus discharging from the faucial region. The neck swelling, however, rapidly subsided thereafter. The child made an uneventful recovery.

It is my opinion that the child had suppuration of the tissues around the neck glands, which extended to the tissues about the larynx; that some swelling of the upper rim of the larynx had occurred and that sudden oedema and complete obstruction of the larynx occurred at the time of making the throat examination. Whether the obstructive oedema would have occurred regardless of the examination of the faucial region by the finger, it was painfully apparent at the time that the examination had produced what looked like a fatal issue.

Loisa: 5 years of age. Seen first Feb. 17, 1910. Recovery from measles about two weeks ago. Patient was up, began going to school again. About week or ten days ago child became feverish—swelling appeared on both sides of neck, worse on right side. Had slight sore throat. Dr. Powers called. Throat showed membrane and culture made; negative. Swelling in neck was so large that diagnosis of mumps was considered. At that time child had slight earaches and was tender to touch all over the neck. Case was seen by Dr. Powers two or three times. Glands of neck greatly subsided. At no time was there any swelling or tenderness over the mastoid, but on account of the history of earache, and uncertainty of diagnosis, I was called today.

Exam: General appearance that of a sick child,—fretful, tongue dry, coated. Mastoid not tender or swollen. Swelling of the glands of the neck marked (But mother states not nearly so large as few days before). Gland of left side of neck slightly swollen. No jugular thickening on either side could be made out. No ear discharge from either side. Both mt. slightly dull, and right one slightly bulging, but not red, rather muddy, as if from catarrhal secretion. No pain in the ear. Hearing apparently fairly good. Throat shows recent pharyngitis. Tonsils not inflamed, small, submerged. Nose stuffed up. Temperature not taken, but mother states has had some

little fever. (Suggested that Dr. Powers be called again as child seemed to be sick and ear signs not sufficient to account for sickness.)

2-18-10—Temp. 99.4 by groin. Patient's condition same. Dr. Powers reports lungs and heart normal.

2-19-10—Condition same. No pain in ear or mastoid. No soreness. Child looks sick. 12 M. right ear broke and discharged with straw colored serum (without any preliminary pain or other disturbances). Temp. today up to about 100.

2-20-10—Temp. rapidly arose during night to 104 without any earache. Dr. King called in consultation. Ear discharge clear serum. Mt. not apparently much inflamed. No mastoid tenderness. No sagging of the canal wall. Left ear slightly muddy in color.

2-21-10—Temp. decidedly septic, without chills or sweats, but remissions from 105 to 100. No jugular signs can be made out. Both ear drums incised freely the night before. On account of the temp. thrombosis suspected. Operation advised. Postponed.

2-22-10—Child decidedly more septic. One or two red spots appearing on the body. Tenderness in the joints but no swelling. Dr. Edwards called in consultation the day before, but no focus of pus found other than from the ear. Both ears discharge muco-pus, but not profuse; appearance of mt. is not that of a severe inflammation. Mastoid not been tender at any time. Possibility of the ear condition being mere incidental has caused refusal of operation.

2-24-10—No change. Temp. varying from 99 to 105. About two remissions in each 24 hours.

Child's temp. has varied past week from 101 to 104½. Several consultations.—Drs. King, Edwards, Black and Powers—negative results. Chest and abdomen apparently negative. Ears still discharging intermittently. Glands of both sides of neck swollen, worse on right side. Examination of blood by Dr. Black shows high leucocytosis.

2-27-10—Swelling and pain in the right groin and left shoulder was noticed. (From this date on, the patient was under the care of Drs. Edwards and King.)

3-4-10—Accumulation of fluid in left shoulder made out.

3-7-10—Subcutaneous injection streptolytic serum 10 cc.

3-8-10—Temp. 105. 10 cc. serum given.

3-11-10—Temp. still zig-zagging, 100 to 104. Left shoulder joint aspirated (Dr. Edwards) 10 cc., thick greenish pus.

3-13-10 Temp. up to 105.2. Vaccine given (pneumococcus). Left shoulder aspirated, pus too thick to flow freely.

3-14-10—5 m. vaccine. 3-6-10—6 m. vaccine. 3-18-10—6 m. vaccine. Temp. absolutely unchanged. Patient growing weaker.

3-19-10—Slight swelling of the feet.

3-20-10—8 m. vaccine.

3-21-10—Pain in right shoulder. Fluid in right instep.

3-22-10—Operated (Dr. Edwards). Left shoulder opened, three oz. of pus removed. Gauze drainage. Right instep opened, $\frac{1}{2}$ oz. pus removed.

3-23-10—No change.

3-24-10—Abscess of right thigh ruptured, discharged about two drams. Temp. running from 100 to 103.8.

3-25-10—Accumulation of fluid from sacrum, also from right scapula.

4-11-10—All wounds entirely healed. Temp. gradually dropped since last exam. From March 27 to April 5, running from 102 to 100 max. then to normal. Vaccine was given gradually increasing doses up to 16 m. Ear discharge ceased May 12th.

Remarks: The mode of entrance of the infection in this case was not determined. It was believed direct infection from the throat through the lymph glands which swelled up in the very beginning caused a true bacteraemia.

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THE RECENT CHICAGO EPIDEMIC OF SEPTIC SORE THROAT.

BY A. S. GRANGER, M.D., LOS ANGELES.

There occurred in Chicago during the past winter and lasting thus far into the spring,* an epidemic of sore throat, caused by a specific streptococcus of rather peculiar characteristics; and unusual from the standpoint of severity of symptoms and complications.

Clinically, the affection was characterized by a tonsillitis, which in some cases presented the local picture of a follicular affair, more often there was a diffuse reddening of the whole pharynx with a moderate swelling of the tonsils; in nearly all, however, the tonsillar crypts were filled with an exudate, more or less purulent in character, and in some a grayish pseudo-diphtheritic membrane spread over the fauces. Constitutionally the symptoms were out of all proportion in point of severity to the local picture, as regards joint and muscular pains, headache, drowsiness and prostration. The attack usually set in suddenly with or without a chill, the patient complaining of slight pain on swallowing. Within twelve hours

the constitutional symptoms appeared. The temperature varied from 101 to 105, pulse relatively slow and the joint and muscular pains intense. The prostration was, from the beginning, marked. There was always a secretion of considerable mucus from the throat and in about 15 per cent of the cases, a peritonsillar abscess developed. At the end of a week or ten days the symptoms might disappear and the patient go on to recovery, but this was by no means the rule, for in a number of cases at this time, there would be an aggravation of symptoms with the picture of a generalized septicaemia.

The complications were unusually numerous and severe. Locally a peritonsillar abscess has been mentioned. In a large percentage of cases the glands in the cervical region were enormously enlarged and tender. In but comparatively few cases did they break down and suppurate. Generally there were noted, arthritis, empyema, peritonitis, pulmonary abscess, otitis

media, erysipelas, brain-abscess, meningitis, septicaemia, and a few others of less importance.

From the throat and tonsils and from the complicating lesions in practically all the reported cases, there was isolated in pure culture a streptococcus having the following characteristics, as worked out by Rosenow and Davis.¹ They occur in short chains and often in pairs. They are strongly gram-positive and have a definite capsule, which is less dense than that surrounding the pneumococcus and does not indent between the pairs as is the case with the latter, and is lost when the organism is artificially cultivated for a short time. On blood-agar plates the colonies are larger and more moist than the streptococcus pyogenes and the zone of hemolysis is narrower and begins immediately around the colony, contrary to the usual hemolytic streptococcus (pyogenes) in which there is a small strip of media in contiguity with the periphery of the colony. On the surface of blood-agar slants, the growth is abundant and moist, but does not present the mucoid appearance of the streptococcus mucosus. Milk is always acidified and sometimes coagulated and in broth a uniform turbidity is produced. Inulin is not fermented. The organisms produce a high degree of virulence, killing guinea pigs, mice and rabbits in from 12 to 24 hours, the animals dying from septicaemia and serositis following intraperitoneal injections of small quantities. Animal passage increases the capsular substance. The behavior of the organism toward the various sugars is not different from that of the ordinary hemolytic streptococci (pyogenes).

A number of cases resulted fatally. In most of these, blood-cultures made before death, revealed the typical organism. Autopsies were fortunately obtained in four cases that came under the observation of Dr. D. J. Davis.²

In all these there was an acute sero-fibrinous peritonitis, generalized; nor could there be found a rupture or perforation of any organ to account for it, moreover in all four cases the organism was obtained in pure culture from the exudate. In three cases there was an acute fibrinous pleurisy, in one an acute pericarditis and in three the organism occurred pure in the heart's blood. Endocarditis was not found. The source of infection was without question in three cases the tonsils or the throat. Another case which came to autopsy presented a purulent meningitis.

Altogether the epidemic has been a severe one. Numerous members of the medical profession have been attacked and all ages seemed susceptible. The fact that the capsular substance surrounding the organism increases on animal passage and decreases when grown on artificial media has led Rosenow to suggest that the high virulence and capsule may be the result of frequent human passage and may serve to explain the unusual severity of the disease.

It is rather interesting to note the occurrence of similar epidemics, in England, during the past 2 or 3 years; in Boston in May, 1911;³ in New York and Baltimore during 1911 and 1912. In England the affection has well been termed "Septic Sore Throat" and the source of the infection was found to be in the milk supply in several instances. The Boston epidemic was doubtless also milk-borne.⁴ Hamburger⁵ recently reported that an organism presumably identical with that described by Rosenow and Davis was the cause of the Baltimore epidemic and the cases could all be traced as originating from a single dairy supply. Furthermore it was found that during the month in which the severest cases had occurred, that the dairy in question had ceased to pasteurize its milk,

reasoning that on account of the extreme cold, it was unnecessary, and when the sterilization was begun again, there was, during the following month, a marked diminution in the number and severity of the cases. Two drivers from this dairy who had been accustomed to drink considerable milk on the premises, were both infected. Dr. Jos. L. Miller informed me some weeks ago that it appeared as though the Chicago epidemic might have been carried by milk, and in a recent preliminary report⁶ by him in conjunction with Dr. Jos. Capps, this view is substantiated by the observation that all of the cases coming under their notice in a certain district received milk from the same dairy. To my mind this is very interesting, and brings up again the old question of the importance of the strict hygiene that should be employed around dairies, and adds one more to the already long and certainly severe list of infections whose source may be in the milk supply.

I am indebted to Dr. E. C. Rosenow of the Memorial Institute of Infectious

Diseases and to Dr. D. J. Davis of St. Lukes Hospital, Chicago, who so thoroughly did the work on the bacteriology of this epidemic and to Dr. Jos. L. Miller for reports of the clinical aspects, for information that made this paper possible.

423 Auditorium Bldg., Los Angeles.

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6. Ibid, p. 1111.
7. Jour. A. M. A., Apr. 27, 1912.

Since the above was written, some experimental work on animals has been done by D. J. Davis⁷ of Chicago, on the relation of the streptococcus involved in this epidemic, to joint lesions, with the result that in every case this organism when injected into rabbits in moderate doses, produced articular lesions. This fact tends to place this organism in close relation to the common hemolytic (streptococci.)

423 Auditorium Bldg.

*Paper written April 5th, 1912.

THE WASSERMANN REACTION IN DISEASES OF THE CENTRAL NERVOUS SYSTEM.*

DR. ELBERT WING, LOS ANGELES.

The conditions of the assignments in this symposium limit the scope of this paper to a consideration of the Wassermann in diseases of the nervous system. It is readily understood that the value of any test in actual practice depends upon the assistance it can give in establishing a diagnosis and in insuring increased effectiveness in treatment.

Without the aid of this new and wonderful laboratory test a diagnosis of syphilis is readily made in most cases, and it is already satisfactorily

established that syphilis causes all cases of cerebro-spinal syphilis, and most cases of tabes and general paresis. But this is by no means all that is to be said concerning the relation between the diagnosis and treatment of syphilis and their relation to those diseases of the central nervous system.

The Wassermann reaction is and will remain of the greatest value in neurology when it is considered merely as a symptom of syphilis. Confusion at once arises if it is assumed that because the Wassermann is present syph-

*Read at the meeting of the Southern California Medical Society, Pasadena, May 1, 1912.

ilis is the cause of the diseases under consideration.

Even cursory reading of current medical journals shows that the relations and reliability of the Wassermann reactions are not yet established. Among others this is the belief of Kaplan, Nouné, Sarbo and Kiss and Hauptmann. By way of illustration Hauptmann proved that increasing the amounts of spinal fluid in a test will transform a negative into a positive reaction. Kaplan explains this by saying that there are many factors besides luetic serum which are capable of delaying hemolysis. His last report was based upon an examination of nine thousand sera at the New York Neurological Institute. He believes that much of the work which has been done in this line is quite unreliable, because, he contends, large experience, unremitting care and rigid adherence to the method of Wassermann are essential.

There are two additional considerations which affect the pathognomonic value of the reaction. It is negative in cases which are undoubtedly syphilitic at the time of the negative phase, and hence its absence means nothing, and again syphilis is present in many cases of disease in which its presence has no pathognomonic significance whatever. Instances of this fact are measles, chronic alcoholism and sarcomatous tumor of the brain. That is to say the Wassermann may fail when syphilis is present and of the greatest importance in the diagnosis and treatment of the case, and may be present when it is of no value either in diagnosis or immediate treatment of the case.

The prominence of Nouné, of increased-globulin-content fame, gives weight to one of his recent papers in which his conclusions are based upon the following cases, viz:

Tabes	167
General Paresis	179
Cerebro-Spinal Syphilis	97
Multiple Sclerosis	68

Cerebral Neoplasm	38
Spinal Tumor	18

He believes that of the "four phase" tests, lymphocytosis and increased globulin content are not positive, the Wassermann not specific but typical, and absence of the Wassermann of no significance.

He believes that syphilis may be excluded in the diagnosis if the Wassermann is absent even if the other three tests are positive.

Sarbo and Kiss report the following percentages of positive Wassermann reactions:

Paresis	91%
Cerebro-Spinal Syphilis	85%
Tabes	79%
Parasyphilis	57%
Chronic Alcoholism	48%
Arterio-Sclerosis	28%
Epilepsy	13%
Neuroses	33%

The following table is given by Kaliski:

CEREBRO-SPINAL SYPHILIS.

Wassermann present in the blood	80%
Wassermann present in the spinal fluid	10 to 20%
Increased globulin	95%

PARESIS OR TABO-PARESIS.

Wassermann present in the blood	90 to 100%
Wassermann present in the spinal fluid	85 to 90%
Increased lymphocytosis	90 to 100%
Increased globulin	99 to 100%

TABES.

Wassermann present in the blood	60 to 70%
Wassermann present in the spinal fluid	10 to 20%
Increased lymphocytosis	90 to 95%
Increased globulin	90 to 95%

The evidence presented in this paper permits several important conclusions.

Of course syphilis is, the cause of cerebro spinal syphilis, and it is the primary cause of a majority of cases of paresis, and tabes. At one time Erb claimed that 75% of the cases of tabes were syphilitic. Later he advanced the figures to 90%.

Investigations with the test of Wassermann rather tend to support the first estimate.

Of the four phase reactions or tests, Nouné is probably correct in claiming

that the Wassermann reaction in the blood is typical and most reliable.

As a guide in enabling the clinician when to suspend and when to resume syphilitic medication, the Wassermann reaction promises to be of incalculable value to the human race. In the great majority of cases of syphilis it is not very difficult to bring about a symptomatic cure, but it is very difficult to induce patients to persist in treatment as long as they should after an apparent symptomatic cure is secured; and by means other than the Wassermann reaction it is not possible for anyone to know that the syphilitic poison is in a negative phase. The present state of knowledge concerning syphilis amply justifies the hope that if the negative phase in reaction to the Wassermann test can be maintained, all of the secondary and tertiary results of that scourge and among them tabes and paresis, may be very greatly diminished. Whenever a physician can have the services of a competent Wassermann worker he can assure his syphilitic patient when the

syphilitic infection is in a positive phase in his blood, and that it is the rankest folly not to be guided by this laboratory test.

It puts into the hands of the physician an argument of the greatest value and power.

He is fully justified in saying to his syphilitic patient that he must have the test made at regular and definite intervals, and that he must "take his medicine" regularly and persistently until he is told to suspend it.

Anyone who is familiar with the late manifestations of syphilitic infection knows that this means not only for months, but for years. The doctor of medicine who uses the Wassermann as he is justified in using it, can go far indeed in diminishing the late results of syphilis, among them tabes, paresis and cerebro spinal syphilis, and none will praise him more highly or thank him more heartily than the neurologists.

321 Kerckhoff Bldg.
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HOW LAYMEN, PHYSICIANS AND HEALTH OFFICERS MAY CO-OPERATE IN PUBLIC HEALTH WORK.*

BY GEORGE E. TUCKER, RIVERSIDE, CAL.

The enthusiastic support which Health officers in certain communities in California have received from Physicians and interested laymen has suggested to me the subject of this paper. On the other hand the lack of interest which has existed among certain of our physicians and among certain laymen in a position to render very great assistance, seems to justify a presentation of the subject from a very different standpoint.

In spite of the very limited experience which the writer has had, much of the subject matter of this paper is

drawn from that source and may possibly not be of any especial value to Physicians or Health Officers, whom we know are already too well acquainted with the facts and the suggestions I wish to present.

About three years ago the California State Legislature, through the influence of some unknown factor, or factors, passed a bill making it mandatory upon every County in this State to have a Health Officer, and fixed \$50.00 per month as a minimum salary for his work, and likewise very considerably limited the amount of money to be

*Read before the Southern California Medical Society, Pasadena, May 1, 1912.

paid to any Deputy County Health Officer to \$100.00 in any one year.

The attention of the Board of Supervisors of Riverside County was called to the existence of this law and in compliance with its provisions, for the first time in some six or seven years, Riverside County had its public health work placed in the hands of an Officer, who was to receive \$50.00 a month, and railroad traveling expenses.

At that time the lay people evinced no interest whatsoever in the subject of typhoid fever, sewage and garbage disposal, clean milk, tuberculosis, eradication of flies or ground squirrels, and in spite of the fact that we had a compulsory vaccination law, outside of one incorporated city, the City of Riverside, no attention whatsoever was paid to its provisions. In other words, Riverside County presented a very fertile territory in which to sow the seed of a general public health campaign.

It was a matter of very great perplexity to the appointed Health Officer to know just where to begin, and to attempt to reach any definite conclusions as to the necessity of working along one line rather than another seemed to be hopeless.

Circumstances arose which made it imperative that some step be taken to locate the source of what was commonly termed, "our everlasting and annoying epidemic of Typhoid Fever." To convince an indifferent public that typhoid fever had long since ceased to be a necessary evil, and to further convince them that the responsible officials, of any community, who quietly and persistently permitted this disease to prevail within its borders, were guilty of criminal negligence, was but little short of the impossible.

Many articles had been written by public health workers stating much of scientific interest regarding the source of typhoid epidemics and the methods

which had been employed towards their eradication, but so far as I was able to discover, no one had ventured to outline any short and successful method by which apparently disinterested physicians and equally disinterested lay people could be convinced of the necessity of immediate, intelligent and active co-operation with their Health Officer in the performance of his duties.

In spite of the fact that the State Board of Health, backed by a State Law, requires the reporting of certain contagious and infectious diseases, little attention is given to the making of these reports; not only in the small communities but also in the larger centers where close proximity of dwelling houses and the frequent contact of one individual with another, makes the spread of such infections very easy and always too frequent.

The key note to success in all public health work has and always will depend upon the factor, education. To attempt to impress upon the people the necessity of each one to learn the fundamental principles of the cause and effect of disease is not justifiable under present conditions. On the other hand it is a comparatively easy matter to select a few public laymen and physicians from among the whole, and convince them of the importance of the conservation of the public health. Concrete and impressive examples of extreme unsanitary conditions are easily demonstrable in almost any village, town, city or rural district.

No where in this State are there examples of general ideal sanitary conditions. We have communities where the incident of typhoid fever is very low. We have other communities which are spoken of as being free from flies. Certain cities point with pride to a relatively clean general milk supply. Health officers will call your attention to the fact that they have had no

deaths in the last ten years from Small-pox in their city or county, and that the number of cases of this disease has been very few. But in no one community can you find examples of sanitary conditions comparable to those brought about under the direction of our National Government in the Panama zone. It is because these things are true that it is necessary, in order to build up generally good public health conditions, to have an active, intelligent co-operation between the laity, the medical profession and the health officers.

To bring about this co-operation on the part of the laity it is necessary:

First, to convince them that too many people are sick who should be well.

Second, that the death rate among their friends and acquaintances is much greater than it need be.

Third, that it is within their power to relieve themselves and their friends of a great part of their sickness.

Fourth, that a certain amount of responsibility in this regard rests upon them.

The methods that have been employed by the city and county health officers of Riverside county may be the same as those commonly in vogue throughout various cities and counties in the state. It had always seemed essential to us that the mayor, the members of the city council and the members of the board of supervisors, should be brought in such close contact with the work of the health officers that they were not only familiar with all unsanitary conditions that existed in their respective districts, but they were also in a position to co-operate not only by passing proper ordinances supporting their appointee, but also by convincing their constituents that they had taken the right action and were pursuing the proper course.

With this in mind several tours of inspection of dairies were personally conducted by both the city and county health officers, not only to dairies in which cattle were handled according to the most antiquated methods, and where the products were collected in a most unsanitary way and distributed by means equally as objectionable, but also to dairies where general conditions were ideal. By comparison it was easy to convince these men of the necessity of dairymen maintaining a healthy herd of cattle, of collecting the products of their herd according to the most modern and improved methods. Through the influence and support of this small nucleus of semi-educated citizens it became possible to eliminate from our community the so-called "dirty dairy."

After educating the dairymen themselves to realize the necessity for strict regulations in the production of milk and its disposal to the public, and by bringing about, in two years' time, a general public sentiment regarding these matters, it was made possible for a properly trained dairyman to establish and successfully maintain a certified dairy in a city where previously less than a dozen people knew the significance of the term.

By the same method it was also possible to convince the officials of a neighboring city that they were responsible for the prevalence of typhoid fever in their sister city, and upon them rested the responsibility of correcting the condition. And so I might enumerate how the elimination of the dirty dairy, the cessation of the prevalence of typhoid fever, the removal of the fly producing elements, the annual establishment of an active, anti-tuberculosis campaign, the building of a sanatorium for the tubercular sick, were brought about very largely as a result of the education of a dozen in-

fluent men in a county of sixty thousand inhabitants.

Public officials are always ready to engage in any active work which they believe will please their constituents, cause them no financial loss, and bring credit to themselves.

Members of fraternal organizations, charitable organizations and church bodies are always eager to engage in any movement which meets with public approval and reflects favorably upon the institution which they represent. Church workers are now easily convinced of the necessity of combining the health interests of their members with the spiritual interests if you but call their attention to the success of the so-called "Christian Science Cult."

Fraternal insurance orders are susceptible to the argument of financial gain as a result of health preservation and death prevention. Charitable organizations become interested and co-operate to the fullest extent if shown the prevalence of human suffering and the simple methods by which it can be eliminated. And so it is possible, through the support and co-operation of this body of workers, for any health officer to bring about health conditions which serve as a direct illustration of the possibility of modern sanitary precautions.

On the other hand, the physicians, individually and as a body are in a position to co-operate with the health officer by calling the attention of their clientele to the work that the health officer is doing, his value to the community and the injustice to him of lack of support. It requires but very little time on the part of the physician to explain, when opportunity properly presents itself, to his patients and to families under his care, the necessity for strict sanitary regulations, the common methods of contracting contagious and infectious diseases, the necessity for quarantine regulations, isolation, dis-

infection, fumigation and various other procedures regularly employed but too often misunderstood.

Physicians could co-operate by reporting contagious and infectious disease promptly, by depending upon their local laboratory for assistance in diagnosis, by notifying the health officer of their suspicious cases and permitting the establishing of a tentative quarantine.

The physician can assist the health officer by calling him in as a consultant in cases of doubtful diagnosis.

The physicians should familiarize themselves with the state health laws, with the state, county and city board of health rules and regulations. They should be familiar with the international list of the causes of death so that their death certificates may be forwarded to the office of the Secretary of the State Board of Health without being referred back for correction, and the physician should always bear in mind that the health officer makes mistakes, has personal characteristics which may not always appeal to him, and may sometimes employ methods that are not the same as those that he would employ under similar conditions.

It should always be borne in mind that health officers are receiving insufficient remuneration, are conducting their offices with inadequate funds, are constantly trying to make the best of the facilities at their disposal and are continually annoyed and harassed by being called upon to settle neighborhood disputes regarding nuisances, etc. It is safe to conclude that health officers are not actuated in the performance of their duties by any selfish motives and do not hold their office because of any alluring pecuniary gain.

The attitude the health officer should assume toward the laity and the physicians is dependent upon the personnel of those in question.

The successful health officer should

be able to impress both the public and his co-workers as to the sincerity of his purpose. Any problem referred to him for solution should be looked upon as of vital importance and warrant the expenditure of time necessary to successfully cope with it. The health officer who is unwilling to make personal sacrifices without remuneration does not possess the disposition upon which success in public health work so often depends.

The public health movement is to exist by virtue of the publicity which it receives and it is incumbent upon him to create a public interest, to foster and nourish every co-operating body or organization expressing a willingness to assist in the work.

The financial gain as compared to the small funds expended appeals to all business men, if submitted in a business way.

The elements of sentiment appeal strongly to the average mind, the matter of cost and economy is convincing.

We are in a position to submit the sick and well, life and death accounts in a most argumentative way. Why not make city councilmen and boards of supervisors our auditing committees and demand that they give the results of their investigations to an unsuspecting but impressionable public.

Moved by the sincerity of our purpose, convinced by the forcefulness of our figures, the ideal co-operation of layman, physician and health officer will no longer be the dreamer's dream, but a realized fact, and we will then have time to erect fitting tablets to the memory of the discredited Senator Works, the defunct League for Medical Freedom, and the long since forgotten Mary Baker G. Eddy.

Public welfare calls for the heartiest co-operation among the health officers, medical men at large, and laymen. To secure this the health officer will

usually have to take the initiative. He knows as no one else, the conditions and needs of his community. All right minded physicians will readily co-operate with the health officer in all possible ways. But the layman must be instructed and inspired to that co-operation with the health officer which is essential to the highest success of the public health movement.

But a health officer who will instruct the public in health conditions of any community, will soon find at least a few public spirited laymen who can be interested in the work, who will help to sustain the officer, and who will create public sentiment in favor of health laws and their enforcement.

The health officer will wisely direct much attention to informing mayors and councilmen and county officers. Converting these and a few wise leaders among other laymen such as merchants, ministers and influential women and women's clubs, the health officer will soon have set in operation influences which will help to transform any community.

The lay world but needs to know what health officers so well know and hearty, patriotic co-operation will surely follow. Let the health officer get town officials to visit the poorer districts and enter the poorer homes, see for themselves the bad sanitary conditions and appreciate their bearing upon the public well-being and with but rare exception will the health officer find himself without lay co-operation. Let the health officer himself prepare stereopticon lectures illustrating health conditions of his community, or let him cause others to give such lectures and public interest and lay co-operation cannot fail him.

This kind of work has been done most effectively, here in Riverside, both town and county, and public interest and co-operation with the health officers has resulted in striking form.

DENTAL EDUCATION.*

BY H. O. WHITE, M.D., PROFESSOR OF ANATOMY, MEDICAL DEPARTMENT,
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Ordinarily at occasions of this character a paper on some scientific subject is presented, but as my time was too much preoccupied in the Anatomical Department of the University of Southern California, I have, therefore, rather reluctantly, concluded to present before you a subject, though not strictly scientific, yet, to my estimation, of equal and just as great importance, and at the same time offer an excuse for my presence.

I wish I had some new discovery or thought to offer you, for what dearer ambition has any of us than that he may add something to the science we love. Good fortune however falls to but few. What I have to say is not new to any of you. The rank and file of the profession has been pushing forward to higher ideals and the average ability of all dental practitioners advances materially from year to year.

Before entering, however, upon my topic, I desire to take the pleasure in expressing my gratitude for the highly appreciated honor and privilege which this body had conferred upon me, through our esteemed colleague and friend, Dr. W. Bebb, by inviting me to address you this evening.

I hasten however to state explicitly that what I may say is offered in no spirit of unfriendly criticism, but only by way of friendly suggestion, and I hope it will be accepted in the same friendly spirit in which it is offered.

The special idea I wish to express to you is that for assistance to enable the student to use means to the best advantage he looks, in part, to the Dental Schools.

The duty therefore of these schools to their pupils is to give them such aid

as will best prepare them for their profession. Again, the duty of those schools to the community at large is to see that with their sanction none of their pupils enter that profession until prepared with an adequate measure of knowledge, skill, and other requisities for the pursuit in which they seek to be engaged.

How have these two important duties been performed by the Dental School of this country?

It is to these questions that I desire to call your attention on the present occasion.

The subject Dental Education has excited of late—as all of you must be aware—much inquiry and investigation both within and without the pale of the profession. On a subject so intricate, and involving such extensive, various, and complex considerations, there has been expressed, as might be expected, a great variety of sentiments. And, as the controversy is one in which it is easy for the passions to enlist themselves—one in which there is a ready appeal to the selfish feelings of ambition, pride and vanity—it is by no means surprising that its discussion has not always been conducted with the philosophic calmness of judgment which both its difficulty and importance would seem to require.

In referring to the conflicting opinions which have been advanced on this subject, I shall omit as unnecessary, useless, and odious, all discussions of the motive of those who have attacked, or of those who have defended the present system of Dental Education. Whether the whole controversy has arisen, as has often been asserted, from hostility between the Ins and the Outs,

*Read (by invitation) before the Pasadena Branch of the Los Angeles County Dental Society, February 16, 1912.

between those that hold offices in the Dental Schools, and those who wish to hold them, is wholly unimportant. If the opinions mentioned on either side be correct, they can not be made better, or made worse by reference to the motives or aspirations of those who advance them. The validity of those opinions is to be proved by the logic and not by the ethics of their advocates; and we should remember that according to Bacon's happy illustration, testimony is like an arrow from a long bow the force of which depends upon the strength of the hand that throws it, while argument, on the contrary, resembles an arrow from a cross-bow, which has equal force whether shot by a giant or an infant.

Leaving, however, out the question of angry feelings, which have been too generally introduced into this discussion, and premitting all allusions to the good or bad faith, and the good or bad intentions of either the reformers or the conservatives, let us direct our thoughts to matters of more interest, and which are more justly connected with the important subject under consideration. The questions at issue are, whether the system of Dental Education in this country stands in need of reform; and if so, what reform is required, and how is it to be accomplished.

In relation to this inquiry I shall proceed to submit to your judgment, as briefly as I can, the opinions which I entertain, and which, whatever their value, have been formed deliberately, and will be stated with the candor of one whose mind is neither biased by prejudice nor agitated by passion.

Many, perhaps most, of those which have taken part in the controversy respecting the Dental Education of the United States, whether as defenders or opponents of those schools, have thought it proper to commence the discussion by referring to the difference

between the system of education employed in this country and that which prevails among most of the nations of Europe. The comparison thus instituted has led the judgment or the feelings of different spectators to different and opposite conclusions.

Some have pronounced that our system is in several important respects greatly inferior to that of Europe.

They contend that it exacts too little of preliminary education before the study of dentistry is commenced; that the time which it requires to be devoted to that study is too short; that our curriculum of studies omits many important subjects which are taught in the European Schools; that the instructions given during the session are hurried, superficial and imperfect; that the examinations of our candidates for degrees is not sufficiently exact and thorough; and that the general result of our system is the turning out from our schools every year of a mixed multitude of graduates, but half educated, and but half prepared for the duties of a profession in which to be but half prepared is often as bad as to be not prepared at all.

Widely different is the judgment expressed by others.

They proclaim that the education given in the Dental Schools of this country is vastly superior to that offered in the European Schools. It is less elaborate, they say, and less ornamental, but more practical and better adapted to qualify its pupils for future usefulness.

They maintain that although our graduates may have learned in the school nothing of Botany, Zoology, Comparative Anatomy, Embriology and various other branches of science remotely allied to dentistry, and which constitute a part of the course of study in some schools of Europe, they are yet, in general, well instructed in subjects more directly connected with

their profession; and that they have acquired the useful and necessary part of their education the more speedily and thoroughly in consequence of their attention having **not** been distracted by application to studies of less practical value.

These admirers of our institutions pronounce that the superiority of the American to the European Schools of Dentistry is conclusively demonstrated by the best of all proofs—the unquestionable superiority of the Dental Surgeons of America to those of Europe.

A learned professor in one of the northern states has announced as a truth undeniable, that “the dentists of this country greatly surpass those of all other nations, not only in the decision but in the success of their practice.”

Another in the west has stated his opinion, “That American Dentists hold, in general, a practical superiority over those of Europe;” and also as he cautiously ventures to infer, “over every other portion of the globe.”

A third, who had seen many wonderful things in Europe, assures me that he has occasionally beheld with astonishment in the clinics of the continent, cases terminate unfavorably, of most reputable Dentists, which the youngest and least experienced dental practitioner in the United States, mere babes and sucklings in American Dentistry, would have cured with ease and certainty.

Now these comparisons are certainly not at all odious, and have no doubt been made with accuracy and perfect impartiality. Yet, as it is impossible for all men to think alike, and as diversity of judgment is of constant occurrence in relation to even the simplest and plainest matters of fact, so in the present case there is as yet no absolute unity of opinion. Some of our dentists who have had the best opportunity for personal observation of the qualifications and abilities of their

trans-atlantic brethren, acknowledge that they have been forced to a conclusion less gratifying to national vanity, and assure us that if there are any among our young practitioners who in professional skill surpass the luminaries of European Dentistry, they have not enjoyed the happiness of meeting with those instances of precocious excellence.

This extraordinary deficiency in their experience would be difficult to explain, unless we ascribe it to a failure of their perceptive faculties, akin to that recorded of himself by honest Bernal Diaz, the Spanish warrior and historian, who tells us “that although many of his fellow-soldiers saw San Jago, and San Pedro fighting on their side in the fore front of the battle against the Tabascans, to himself, sinner that he was, it was not permitted to behold either of those blessed Apostles on that occasion.”

The difference between the systems of Dental instruction prevalent in the American and European Schools, whatever its effects upon the character and attainments of the pupils of those schools, has evidently arisen, in part, from the difference between the political and social condition of this country, and that of all the rest of the world.

The education of our dentists is in some respects inferior, in others fully equal, to that of the members of our profession in Europe. In this country the purely practical part of Dental Science is carefully taught and well understood. Attention is also paid to so much of speculative research as is directly useful or necessary for application. But in general, less time and labor are devoted to the essentially abstract doctrines of the science. We have been, for the most part, content to make application of the laws and principles discovered by others. In discovering and investigating these laws, we have manifested less interest.

Democratic institutions, and the

habits of mind which they induce, naturally hurry men into the pursuits of active life. They disincline us from the study of science for the sake of truth alone. They lead us to seek, not the hidden philosophy, but the immediate and practical results of the sciences. The people who live under such institutions enjoy the privilege of selecting with perfect freedom whatever pursuit they may think the best for the improvement of their fortunes; and they naturally resort to the use of those means which they believe will be most effectual for the speedy accomplishment of that object. They find the skillful application of the rules of art more profitable than the patient investigation of the mysteries of science. The general mediocrity of their fortunes, their desire for competence, and the constant effort to which they are tempted by the opportunities they enjoy for attaining it, will always tend to make a democratic people view with comparative neglect all studies and inquiries but those which are judged of direct and immediate practical utility. Another circumstance that has helped to occasion the difference between the system of dental education here and that in Europe, is the interference of civil government in many of the European States to regulate the Dental Schools.

In this country, the Government extending in general little or no patronage to the schools, forbears to exercise any authority over them. It knows nothing of the qualifications which are required of the pupils who wish to be received, or of those who wish to graduate. It prescribes, in most cases, nothing respecting the length of the sessions, or the amount and character of the instructions to be communicated.

The two circumstances which have been referred to—the peculiarities imposed upon our people by their democratic institutions, and the forbearance of the government from interfering

with schools of professional instruction—if they affect the character of our professional education, as I believe them to do, ought evidently to produce similar and equal effects upon the education of those who are preparing themselves for the other professions. And such undoubtedly is the case. The students of Medicine, Law and Theology throughout our country are affected by these causes in the same manner and probably in the same degree, as the student of Dentistry. They also are, in general, perhaps, less fully prepared by literary education for the study of their respective professions than might be desired. They also employ less time in professional study than is customary in Europe.

They are also in the habit of precipitating themselves with more haste than good speed into the active pursuit of their business. The traces of haste and of consequent imperfection, are but too visible in all of them.

The general character of education in the dental schools in practically all its forms appears to have been overlooked by many of its members of the Dental Profession who have been active in urging the necessity of reform in our system of dental education. They seem to consider the deficiencies which are in reality common to most of our institutions of learning as peculiar to the dental schools alone, and to believe that no ill-educated youths can be found in the United States, except among the students of dentistry, and that the only persons who are imperfectly prepared for their business in life are our young dentists.

The uncharitable spirit of those who entertain it, like the charity of some others, is of too domestic a variety, to say the least. These censors might be led to a juster and more favorable estimate of the qualifications and merits of their youthful brethren by inquiring somewhat into the learning of our young physicians, lawyers and divines.

That there are such men in the other professions referred to, as in ours, is unquestionable; that their proportion is fully as large as in ours, is equally certain; and those among us who have overlooked this obvious fact, and claimed for the dental profession the bad eminence of a monopoly of all the evils of imperfect education, are certainly guilty of extreme injustice to their neighbors in other walks of life.

Admitting however that the education of the dentists of this country has been necessarily affected by the causes previously intimated; and admitting also that it is in no respect inferior to the educations of other professions; it will yet by no means follow that no efforts should be made towards its improvement.

Such improvement from the peculiar condition of our people, may indeed be difficult to accomplish; but its accomplishment is not impossible; and the difficulty should therefore not occasion despondency, but rather stimulate us to increased exertions to effect so desirable an end. Efforts should be made, vigorous and constant efforts to improve dental education.

The improvement of that education is an object of vital importance to the community. And that it is not impracticable in this country is proved in the most satisfactory manner by the fact that dental education has already been signally improved. This will not be questioned by those who are acquainted with the changes that have taken place in the best dental institutions during the past few years.

But the question which has been most discussed is not whether it is required or is attainable, but rather what improvement should be made, and how it should be made. These are the questions that are certainly entitled to mature and candid consideration.

In the first place it is complained that young men and women are received into the schools as pupils, who

from deficiency in their general education are wholly unqualified for any scientific attainment, and, secondly, that pupils are permitted to graduate too easily and after a comparatively brief study that it is impossible in the nature of things that they can have acquired, whatever their capacity, an adequate and sufficient amount of professional information.

The first of these objections is beyond question well-founded, and is of very great importance. There can be no doubt that the admission into the schools of dentistry of pupils who are not provided with sufficient preparatory education, is the great predominant evil in our system of dental teaching;—an evil of such magnitude that until it is corrected no improvement can be made that will be of any substantial and permanent utility.

Be it however understood, that in speaking of deficient education, I use that expression not in the restricted and narrow sense which it is commonly employed, but also the imperfection consisting in the want of proper training of the mind to habits of attention and application, to the habits which are indispensable for the discovery and comprehension of truth. Without it, no man can be prepared to enter with advantage upon the study of dentistry, or upon any other study requiring exercise of the intellectual faculties. Pupils who come to the schools of dentistry destitute of such training, are in many cases scarcely capable of acquiring professional knowledge.

They have not learned the art of learning.

Every teacher knows the difficulty of imparting scientific instruction to minds thus unprepared for its reception. The preliminary education acquired by whatever mode of discipline, can not but be considered highly desirable.

It is justly urged, that a professional person's preliminary education regulates his ability and fitness for many

of the principal and most useful duties of his profession; and that the reputation of the profession and the estimation in which it is held by enlightened persons engaged in the other professions depends not barely upon the strictly professional attainments of its members, but also in very great part upon their familiarity with such elegant and ennobling studies of physiology, comparative anatomy, chemistry, biology, embryology, philosophy, mathematics, history, poetry and some languages.

The obvious remedy, as some suppose, and one which I would strenuously recommend is that the dental schools should insist on a higher standard of preliminary education; should receive none into their classes who have not been trained and elevated up to that standard and should demand that their pupils be scholars before they attempt to become dental practitioners.

That students in our dental colleges are allowed to graduate too easily, is an undeniable fact, and in none of them is the examination of candidates rigid enough before they are admitted into the ranks of the profession. The examination of these candidates is generally not excessively severe. The rejection of a candidate occurs, I am quite certain, seldom, to say the least. And this reminds me of an incident when Washington Irving was an applicant for admission to the Bar, the slight difficulty thrown in his way by the almost unexampled scrupulosity of his examiners was removed by a jest.

"Martin," said one of them to the other, "I think Irving knows a little Law." "Make it stronger, Joe," was the reply, "Say damned little;" and with this compliment was the ingenious Knickerbocker ushered into a profession with which—happily for the literature of this country—he was destined to have only a nominal connection.

While I freely admit that the objections which I have been examining are not without force, I am far from

assuming that evils complained of can not be remedied in every respect, and let us sincerely hope there will be great improvement in the very nearest future.

Let such improvement be made and continued, and let no one connected with the dental schools feel any sympathy with that dull and wicked spirit of selfish conservatism which prefers darkness to light, and dreads reform as hostile to its interest.

Far from all teachers of dentistry be such oblivion of their duty to their pupils, to their profession, to the community, and to themselves, as would suffer them to view with aversion or with indifference any measures tending to advance and elevate the character of dental education, and thereby of the dental profession. They should be ready, and I believe that in general they are ready, to exert themselves to the utmost, and among the foremost for the accomplishment of that end.

The most important service that dental schools can afford its pupils is to furnish them every possible means, opportunities and facilities to obtain a thorough knowledge in the important vocation they are to follow. And if these are supplied, the student will seek in vain for any valid excuse for an insufficient professional education.

There is no royal road to dental science; and the schools have no power to construct such road for their pupils. The aim of all schools should be primarily to ascend to a level of high professional proficiency. And that can be accomplished only by those who value knowledge above all else, except virtue and honor, only by those, who in the quest of excellence, think nothing done, while aught remains to do; only by those who are filled with that heroic spirit which in the pursuit of a noble end counts not itself to have apprehended, but forgetting those things which are behind reaches forth unto those which are before.

2901 Dorchester Street.

THE CLASSIFICATION OF INSANITY ADOPTED AT THE NAPA STATE HOSPITAL.

A. C. MATTHEWS, A.M., M.D., NAPA STATE HOSPITAL, NAPA, CAL.

In order to pursue intelligently the care, custody, and treatment of the insane, it is essential that one should have a clear grasp, not only upon the nature of the psychosis with which he is dealing, but also upon all the etiological data so far as can be ascertained. It is impossible to treat in a rational scientific manner the various psychoses without a careful analysis of both the mental and physical symptom-complexes. After the examinations have been completed, and all the available data carefully considered, it will be found that the case as a rule will fall within one of the groups to be given presently. In several groups the etiology is the more important factor in determining a classification as seen in brain tumor, acute chorea, multiple sclerosis, traumatism, cerebral lues, alcoholism, etc. In the above I do not wish to infer that the mental complexes do not assist us in our diagnoses, but I do wish to infer that such cases are considered as ethiologically classified. In other groups the classification presupposes not only a definite etiology but fairly well established abnormal mental phenomena such as arteriosclerotic, infective, exhaustive, auto-toxic insanities, the symptomatic depressions, etc. On the other hand there are certain psychoses in which a classification has to be determined by the clinical features, as the exact etiological data are as yet ill-defined. This includes paralytic dementia, involution melancholia, dementia praecox, etc. Thus it appears that the grouping of cases is based in most instances where possible upon the etiology, but where the underlying causal factors are ill-defined or unknown, the clinical features have to be considered.

With the rapid growth of modern civilization, the duties and responsibilities of the alienist are daily becoming more arduous and complex, and yet how often does he find himself poorly equipped to grapple with the problems forced upon him. There is no department in medicine in which the investigator needs to be more in touch with the advances of modern science than in psychiatry. Science has demonstrated that the anomalies in thought, action, volition, and emotion, popularity referred to as forms of insanity, are the expression of a disordered functioning of the central nervous system. Gradually we are awakening to an appreciation of the fact that the same general methods of investigation that are applicable in the study of all biological sciences may be successfully adopted in attacking the problems connected with mental disease. The wide-awake and progressive alienist is conscious of the fact that better knowledge of mental disorders pertains today than ever before, that yearly many difficult and seemingly hopeless problems are being conquered, and that the outlook for further enlightenment and advances is very encouraging. What does mania, melancholia, dementia, confusion, stupor, etc., mean to a psychiatrist of today as far as classification is concerned? They have fallen by the wayside as weaklings in the onward march along psychiatric lines, being now referred to only as symptoms in a clinical picture. For example, if we speak of mania, do we mean an alcoholic condition, a paretic disturbance, a senile delirium, a praecox excitement, or what not? When we say dementia, do we refer to an alcoholic deterioration, a paralytic stupidity, a praecox indifference, or other forms of dementia?

Thanks to the great Kraepelin whose keen insight, careful judgment, and years of painstaking study and observation gave us a classification which stands out as a distinct landmark in psychiatry today! A modification of this classification is now being used at Napa. By adhering to it, we are able to give a prognosis with a fair degree of certainty in many cases, and it renders valuable assistance in the proper treatment of this important class of dependents. There are twenty-four headings.

1. Psychoses with Brain Tumor.

2. Traumatic Psychoses. The most common clinical forms are:

(a) Post-traumatic delirium.

(b) Post-traumatic constitution (irritability, sensitiveness to alcohol, paranoid trends, hysteroid or epileptoid attacks.)

(c) Traumatic defects conditions (aphasia, deterioration with epilepsy, progressive mental enfeeblement, etc.)

It is useless to speak of trauma as an essential etiological factor unless there is a definite relationship between the injury and the psychosis. How often do we find that trauma is only a contributory factor in precipitating another definite mental disorder such as the praecox states, manic-depressive insanity, general paresis, etc.

3. Senile Psychoses.

This class is undoubtedly fairly well understood including as it does those forms of mental disease appearing in the period of involution, and characterized by failing memory, progressive defect of apprehension, confusion, marked limitation of thought, various and occasionally fleeting delusions and hallucinations together with variation in the emotions. Here also belong the so-called presenile states with their persecutory notions, and less impairment of memory. As subdivisions of the senile states we might name:

(a) Simple deterioration (of memory, grasp, and interests.)

(b) Presbyophrenic type (similar to Korsakow mental-complex.)

(c) Delirious and confused states.

(d) Depressed and agitated states.

(e) Paranoid states.

4. General paresis.

This condition, known also as dementia paralytica, general paralysis of the insane, progressive paralysis, or, for short, paresis, was a century ago one of the curiosities of medicine. Its first description was by Haslam, an English physician in 1798. Its symptomatology and pathology have been established. The disease, itself, according to Kraft-Ebing, is the product of "civilization and syphilization" and constitutes from eight to fifteen per cent of all insanities. It was the diagnosis in fourteen per cent of the cases admitted to the Napa Institution during the first half of the fiscal year ending December 31st, 1911.

5. Psychoses with other Brain or Nervous Disorders.

These cases are etiologically classified. The nervous affections most commonly met with are the following:

(a) Cerebral syphilis.

(b) Cerebral arteriosclerosis (focal or diffuse vascular disease.)

(c) Cerebral embolus or hemorrhage.

(d) Brain abscess.

(e) Tubercular meningitis.

(f) Central neuritis.

(g) Multiple sclerosis.

(h) Polyneuritis (if not grouped under toxic, alcoholic, or infectious disorders.)

(i) Tabes dorsalis.

(j) Acute chorea (if not hysterical.)

(k) Huntington's chorea.

(l) Other nervous disorders to be specified.

To show the value of ascertaining the exact etiology, I will refer briefly to my review last year of sixteen cases of cerebral lues with psychoses. As the cases were all microscopically diag-

nosed, there was no doubt about the etiology. Several of the cases, especially in the advanced decades, looked upon clinically as belonging to other forms, were found to be of the syphilitic type. One in particular, pursuing a catatonic praecox reaction for years, was found to be a syphilitic meningitis case. Recently, a case at Napa showing symptoms favoring a hebephrenic praecox, but in whom there were strong suspicions of a syphilitic infection, rapidly returned to a normal mentality upon the intravenous injection of salvarsan. We were probably dealing here with a beginning syphilitic meningitis. There were no evidences of a gummatous infiltration, and if it had been one of the syphilitic vascular type we would expect very little if any benefits from therapeutic measures.

Again under this heading I will refer briefly to a case of cerebrospinal meningitis admitted last August, on a stretcher, comatose, emaciated, with food-refusal for ten days. A careful examination revealed evidences of a meningitis and a lumbar puncture showed the diplococcus intracellularis. Three days treatment with Flexner's Serum resulted in a speedy recovery. The importance of determining the etiology in psychoses needs no further comment.

6. Alcoholic Psychoses.

Upon the basis of alcoholism a number of fairly characteristic mental disturbances develop and are grouped as follows:

- (a) Pathological intoxication.
- (b) Alcoholic deterioration.
- (c) Delirium tremens.
- (d) Korsakow's disease (polyneuritic psychosis.)
- (e) Acute Hallucinoses.
- (f) Chronic Hallucinatory type.
- (g) Paranoid states.
 - (i) Acute delusional type.
 - (ii) Chronic delusional type.

(iii) Delusion of jealousy.

(h) Other less characteristics symptomatic types should be specified.

For the first half of the year our alcoholic insanities formed eight per cent of the total.

7. Drug and Other Psychoses.

(a) Morphinism, cocaineism, chloralism, etc.

(b) Lead intoxication (several forms are described.)

(c) Gas poisoning (delirium or confusion.)

(d) Food toxicoses (tea, coffee, ergot, etc.) and Pallagra.

8. Infective-Exhaustive and Auto toxic Psychoses.

(a) Infective or exhaustive reactions.

(i) Febrile delirium.

(ii) Infection delirium.

(iii) Exhaustion delirium (acute confusion, hallucinatory delirium, "amentia.")

(iv) Delirium with heart disease.

(b) Autotoxic disorders.

(i) Thyrogenous disorders.

(ii) Uremic and diabetic disorders.

9. Allied to Infective-Exhaustive Psychoses.

Here we have a symptomatology of the infective or exhaustive conditions, but without a definite determined etiology.

10. Symptomatic Depressions.

Depressions closely associated with some physical ailment which more or less naturally predisposes to despondency (heart diseases, gastric disorders, malignant growth, etc.) Fluctuations occur in the depression depending largely on the severity of the physical symptoms or degree of discomfort or pain which the patient suffers.

11. Depressive Hallucinoses.

A condition not described by Kraepelin. Depressions generally of acute onset in which hallucinations (usually auditory) dominate the scene, the sen-

sorium remaining clear, the mood being one of anxiety or fear. Toxic or infective-exhaustive features are not demonstrable as etiological factors.

12. Involution Melancholia.

Agitated depressions of middle life and later years developing after prolonged worry and uneasiness with fretting and insomnia.

Because of the recovery of a large number of these cases, even after years of mental disturbances, and of the fact that there are other features resembling the manic-depressive states, Kraepelin has now placed this class with the manic-depressive group. As a rule alienists in the U. S. are not inclined as yet to accept this view.

13. Depressions Undifferentiated.

14. Dementia Praecox.

A misnomer in some respects because cases, clinically belonging to this type, do occur in those of middle age or past. The fact that this is a deteriorating group is established and the following forms have been made.

- (a) Paranoid.
- (b) Catatonic.
- (c) Hebephrenic.
- (d) Simple.

Thirty-one per cent of our cases for the first half of the present fiscal year consisted of this type.

15. Allied to Dementia Praecox.

Cases resembling the praecox group but recovering should be classified separately for further study.

16. Paranoid Conditions.

Here we place all cases of paranoid condition with or without systematization of the delusions, and showing an absence of mental deterioration.

17. Manic-Depressive Psychoses.

This is a very important group; consists of the

(a) Manic attacks, with the push or pressure of activity, shown in the increased motor activity, the voluble flighty talk with distractibility, sound associations, rhyming, etc., together

with an exhilaration of the emotions, or irritability, and the

(b) Depressed states in which opposite conditions predominate such as retardation of thought, a feeling of inefficiency and loss of ambition, with a depressed emotional reaction. If we get a combination of some of the manic traits with the depressed features we have the

(c) Mixed forms.

18. Allied to Manic-Depressive Psychoses.

Here are grouped the recurrent psychoses resembling somewhat the manic-depressive insanities, but being sufficiently atypical to justify placing them in a separate group. Many of these cases have a persecutory trend from which they recover after varying durations.

Example:

L. A. admitted October 11, 1909. Two attacks. First attack, onset sudden. October 1909 became excited, fleeing from imaginary pursuers; at times noisy, claimed that chinamen were after her and intended to eat her. She gradually improved and was discharged as recovered, October 1909.

Second attack: Became noisy and violent in Oct. 1911., and claimed that she was being persecuted by various people who intended to injure her and were speaking disrespectfully about her character. At the hospital she had the idea that she had been persecuted by one man for many years and that the devil assisted him. Heard the voice of God and the devil and had visual imaginations. Constantly suspicious of people. Paroled in March 1912, apparently recovered.

19. Epileptic Psychoses.

In epileptic disorders we recognize

- (a) deterioration.
- (b) dazed states.
- (c) delirium, and
- (d) excitement (simple or hallucinatory.)

Care should be taken here to isolate the epileptoid states occurring upon an organic basis as in general paresis, arteriosclerosis, trauma, and other conditions, and those of a functional nature, as hysteria, alcoholism, etc.

20. Hysterical, Psychasthenic and Neurasthenic Psychoses.

(a) Hysterical type.

"Submersion of a disturbing experience or issue and conversion of the reaction into hysterical manifestation, as a rule with anemic mechanism." (Freud.)

The study of hysteria has shown the possibility of continuous suggestion through undercurrents or complexes of ideas more or less split off from one's ordinary or waking consciousness so that the patient is not directly aware of the disturbing elements. By psychoanalysis one may thus demonstrate that the dynamic factors which precipitate the attacks are undercurrents of thought suppressed or disassociated from the patient's ordinary waking consciousness.

(b) Psychasthenic type.

"Ruminations leading to states of tension and panic and substitution of phobias, obsessions and incomplete reactions generally." (Meyer.)

The essential feature of psychasthenia is found, according to Janet, in a lowering of the psychological tension (i. e., efficiency.) This is a general lowering of the level of consciousness (attention) without the gaps (amnesias), paralyses or subconscious components found in the hysterical. A feeling of subjective insufficiency is associated with doubts and difficulty in distinguishing between real and unreal, then come incomplete reactions, impulses, panics, fears and obsessions. The disturbing factors are usually easy to get at as they are not buried or split off as in the hysterical type.

(c) Neurasthenic type.

Great mental and motor fatiguability accompanied by irritability, pains, hy-

peresthesias or parasthesias. The neurasthenic type can not always be satisfactorily differentiated from the psychasthenic.

21. Other Constitutional Disorders and Inferiorities.

A variety of types fall under this general heading. A satisfactory classification is not yet possible, but as provisional clinical groups one may contrast two types.

(a) Constitutional psychopathic state.

These individuals are usually well endowed intellectually, or at least are superficially bright, but they show lack of emotional balance, weakness of judgment and undue suggestibility which traits are often combined with defects of character or perversion of instinct. To be included here are many cranks and eccentric persons; also the constitutionally nervous, despondent, elated or hypochondriacal natures; furthermore the moral delinquents and individuals with abnormal sexual instincts. On this psychopathic basis episodes of various form may occur and necessitate commitment (excitements, depressions, paranoid trends, hallucinatory attacks, etc.)

(b) Constitutional inferiority.

Intellectual deficiency of a mild degree to which may be added neurotic traits, signs of emotional instability or moral defects. Transitory attacks of excitement or depression, paranoid states and hallucinatory episodes may develop in these constitutionally inferior persons.

22. Imbecility and Idiocy with Insanity.

The transition is gradual from the constitutionally inferior type to imbecility. The latter includes the coarser grades of defect which usually render the person dependent because of unfitness for any occupation except the simplest kind of labor under direction. Emotional instability or irritability may be prominent. Episodes of various

kinds may occur and bring about the commitment of such defective individuals.

23. Unclassified.

24. Not Insane.

It is quite likely this classification will be greatly altered as time produces more evidence favorable to a different grouping, but I believe it is the best

we are capable of producing with our present knowledge of mental diseases. It is very likely that several of these psychoses, which appear to stand out as distinct entities, will endure, as general paresis, the alcoholic insanities, infective-exhaustive conditions, the manic-depressive, dementia praecox and others.
Napa State Hospital.

THE NOBILITY OF NURSING.*

BY C. W. PIERCE, M.D., LOS ANGELES, CAL.

Members of the Class 1912:

Your friends have gathered here tonight to congratulate you upon the completion of your training for your chosen profession, and wave you good-speed as you go forth upon your journey. The faculty of the California Hospital who have had any part in your training know that you have worked hard and faithfully during your preparation, and on their behalf I most heartily congratulate you on this occasion.

You are now to turn your backs upon the yesterdays and watch for the dawn of a tomorrow to commence your real life work. You will look back upon the training school and face the problems of your profession where you will be dependent upon your own resources. You will have no head nurse to call in nor even an undergraduate to assist you, but may the difficulties and the burdens be ever so formidable you must meet them bravely and alone. There is always a note of sadness as one thinks of severing the ties that have bound a student body in close relationship such as yours have been, and a minor cord is struck as we say goodbye to all the environments which we have learned to love, but in this restless age of unsentimentalism there is little time for retrospection, and already you have heard the clarion call

to battle. You are bivouaced tonight where the streams of yesterday and today take their source, one to the land of darkness and dreams, the other to the land of hope and labor. You have adopted a noble profession. I believe that a woman who devotes her life to nursing comes next to motherhood in fulfilling her natural destiny. Good nurses are born, however, and not made. I will say to you now if you are entering the profession thru any purely mercenary motive yours will be failures. There must be a devotion for your calling and a consecration to your work which money cannot buy. As there is not wealth enough in the world to buy the love of a mother for her sick child, so, there is not money enough in the world to buy your very life and soul which you will be called upon to contribute to your work. The little babe is rich who has a devoted mother, tho its home be ever so humble and its cradle draped with sacks instead of silks. A mother may be surrounded by every luxury that money can buy, servants and nurse maids at her beck and call but her babe is to be pitied if with all this luxury it has not a mother's devotion and left to a maid to be taken care of, and a nurse who does not put her soul and life into the work falls short of the mark.

You will find during your work you

*Address delivered at the Fourteenth Annual Commencement of the Training School for Nurses of the California Hospital, May 23, 1912.

will be called upon to pass long hours in sleepless vigils over the sick bed, where life is hanging by a slender thread, but amid it all your devotion to your work will be your support and not any mere monetary recompense.

"Soldiers," said Garibaldi, "that which I have to offer you is this; hunger, thirst, cold, heat; no pay, no barracks, no rations, but frequent alarms, forced marches, charges at the point of the bayonet. Whoever loves our country and glory, follow me." Four thousand men, instantly volunteered and formed the nucleus, tho many lost their lives, of that noble army, whose intrepid bravery won the admiration of the world, the freedom of Italy, and gave to all men for all time that priceless boon which noble lives, consecrated to a noble championship for humanity, always convey. Therefore, go forth tomorrow, consecrated body and soul to your noble work and every day you will rejoice in it. Wherever duty calls go at once as on an errand of mercy, not on a mercenary errand, and there will be developed in you and for you the noblest life that any human being can attain. Be true to your patient. You will find that humanity assumes a common level when afflicted with disease. A man's view of life and things in general become distorted when tossing upon a bed of pain. You must make allowances for his distorted mind, and possess yourself with that greatest of all attributes of a nurse, tact. You will be called into a home where discord and disease and turmoil run riot, but with confidence and firmness and tact you will smooth out the wrinkles, pour oil on the troubled waters, and what a blessed calm reigns in that household thru the influence of a thoroughly trained and tactful nurse. You will find most patients grateful indeed for your work. Occasionally, of course, you will be called upon to attend a

man like the fellow who died and someone asked "what was the complaint" and the reply was "no complaint, everybody satisfied." Make a close study of human nature, it will be your greatest asset in your work. Above all, don't be a talkative nurse. Then too, learn to be true to the attending physician. The nurse is to the physician what Marshall Nea was to Napoleon and France. They called him the sword of France, and the right arm of Napoleon. You are the right arm of the physician. The physician is the general in chief in charge of the battle. You are his lieutenant. You are to report each hour and day's progress. He comes on the scene perhaps once a day, and to a great extent plans his forces according to your report. Sometimes there may be rumblings of discontent in the household or amongst the solicitous friends, a word from you, who have been able to learn these things, may help the doctor out of many a difficulty. A timely suggestion from you who have watched the progress hour by hour may prove profoundly helpful in a difficult case. Don't be merely a machine, carry out the doctor's orders, but use common sense. Don't be like the fellow whom I read about who lived in an apartment house. For three different nights the occupants of the adjoining flats were annoyed by someone running around the room all night, finally the party seemed to be skipping around the room. They could stand it no longer so knocked at the door determined to find out what was the matter. The fellow was in his shirt sleeves and looked heated and worn out. When asked what in the world he was doing he said "it may be hard for you, but its harder for me. The doctor gave me some medicine and told me to take it three nights running and skip the fourth night." Be true to yourself. Take advantage of every opportunity to improve your body; mind

and soul. Take good care of your health. Keep your mind clean and wholesome, study along some definite line, and read as widely as possible. You will be called upon often to be more of a companion than nurse. Beware of temptations that will come to you. Don't be discouraged if you have an occasional idle week. A traveling salesman once telegraphed into his house that he did not think it much use to go on over his territory as fifty different salesmen were ahead of him. His boss telegraphed back, "Go ahead, there are five hundred following you." So go ahead, do your duty and you will always be in demand. Finally, this: "Above all, to thine own self be true, and it must follow as night the day, thou canst not then be false to any man."

Wright and Callender Bldg.

The treatment of human cancer will, with the "utmost probability," Prof. Kiliani, of Columbia University, feels justified in saying, soon "enter on an entirely new phase," thanks to the prolonged researches of the distinguished German bacteriologists, von Wassermann and Ehrlich. That is the reasonable hope. It is not more than that. What has been actually attained is the discovery of a compound, eosin-selenium, which when administered to cancerous mice, destroys the diseased tissue, leaving the normal tissue intact. Sometimes complete cure follows. Sometimes, if the cancerous growth is large, though the cancer is destroyed, "the animals succumb to the poisonous qualities of the resorbed tumor masses." Treatment in human subjects would, therefore, probably be supplementary in most cases to a surgical operation. This, however, might be less extensive, if, as seems probable, the specific could be relied on to extirpate those "roots" that are so apt to bring about a recurrence of the dis-

ease. The discoverers are careful to raise no undue expectations. If there have been experiments on human beings, as is quite possible, there is as yet no report of them or of their present outcome. It is significant, however, that this specific cure for cancer in mice was suggested by observation of the strange behavior of its constituents on the cells of human cancer. The prospect, therefore, that they, or some modification of them, will effect similar results in men to those which have been tested in mice, is auspicious, though, as yet, felicitation would be premature.

SUGAR AS A HEART TONIC.

In the British Medical Journal, for March 18th, Dr. Goulston, and in the same publication, for April 1st, Sir James Sawyer give very favorable reports regarding the effects of cane sugar in cases of dilatation of the heart in the aged. Sir James Sawyer has also prescribed sugar in wasting disorders, some forms of anaemia, adynamic rheumatism, and the neurasthenia of neuratic subjects with such excellent results as increase of weight, power, strength, and vigor, without the production of sudden excitement. The patient is advised to carry with him about half a pound of lump sugar daily and eat it from time to time except just before meal. Sir James concludes his paper by saying that henceforth we must think of members of the sugar group as sustainers and developers of the heart musculature in failure of compensation and in a large variety of cardiovascular troubles. He advises obstetricians to prescribe it in cases of uterine atony and as a general tonic and food throughout pregnancy. Pure cane sugar should be used, a simple test for which is its luminosity when two lumps are rubbed together in the dark.

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EDITORIAL

A GLIMPSE OF GUATEMALA CITY.

Two days (five hundred miles) north of the city of Panama we stopped at the Port of San Jose de Guatemala. Our ship anchored about one half mile distant from the wharf and three big scows were brought out by a little tug to carry us in. The men went down steep slippery steps while the women were taken from the ship in a basket—three or four being swung over into the scow at a time. You can imagine the discomfort in the bottom of a scow in a tropical sun, without a breath of air stirring. Soon we were at the wharf and there we were all taken in a basket—three or four at a time—and landed in the warehouse. A short walk brought us to the train that was to carry us to Guatemala City, seventy-five miles inland. The road belongs to Americans and there was no complaint to be made about the cars.

Guatemala City is at an altitude of 5000 feet above the sea, and soon we were climbing through coffee and sugar plantations, banana groves, and fields

of pine-apples. As we went higher and higher the temperature became better and better. When within a few miles of Guatemala City we skirted a beautiful lake for several miles, and then crossed one arm of it—very much as the Central Pacific crosses one arm of the Great Salt Lake. From time to time we would pass a great oil tank with the words "Union Oil Company" upon it, showing that this Los Angeles Oil Company supplies the railroads and manufacturing establishments of Guatemala.

After about three hours' ride we were landed at a modern railroad station in the city of Guatemala. Representatives of the Government met us and we were soon in automobiles that had been assigned to us. There is no speed limit in Guatemala City and the ride we had from the station to our hotel was startling. The streets are mostly of cobble stones with the gutter in the center, and at each street crossing we crossed a deep gutter—but that made no difference to our chauffeur.

He went at the rate of about forty miles an hour and, surprising to say, landed us safely at the hotel.

The hotel was picturesque with a patio, with flowers, and with fountains and birds, but there was not a bath room in the house. We found this was the condition of every hotel in the city. There were no water closets and the odor from the toilets pervaded the offices and even the dining rooms of all the hotels.

We were met by Dr. Jules Bianchi, who is Professor of Therapeutics in the National Medical College of Guatemala. Dr. Bianchi was born in Guatemala and is one of the leading practitioners of that city. He has been in Los Angeles, and inquired especially in regard to his friends Dr. G. W. Lasher and Dr. F. T. Bicknell. Dr. Bianchi is a regular reader of the Southern California Practitioner and, consequently, keeps abreast with Medicine in America. The Doctor took us to many of the points of interest in this city,—amongst others was to the Medical College, which is an institution that is doing good work. He offered to take us to the hospitals but our business was to get away from hospitals and so we declined his invitation, especially as our time was very short.

One of the points of interest is the Temple of Minerva. This is a beautiful Grecian Temple with many columns, at which annually the honor pupils from the schools of Guatemala gather and the President of the Republic distributes prizes to those who have been chosen on account of their excellence by the principals of the schools. The population of the Republic of Guatemala is two millions (about the same as California) and there are sixty thousand children in the public schools.

There is no state religion and the government does not put any restrictions as to the manner of worship.

Although there are several Protestant churches in the city of Guatemala the Roman Catholic is the predominating faith. The Cathedral is an imposing structure and is opposite one of the principal parks. The day we were there they were having a unique procession together with prayer for rain.

Dr. Bianchi also took us to the cemetery where there are many fine monuments, but the most curious thing in this cemetery is a wall, probably a mile long, which is about 20 feet wide and 15 feet high, reticulated by pigeon holes each one of these being large enough for a coffin to slide in. These pigeon holes are rented to the friends or family of the dead for \$3.50 for seven years. At the end of the seven years if the friends do not pay another \$3.50 the coffin is taken out and the contents emptied into a crematory. At the time the body is first buried a large amount of quick lime is put in the coffin with it. After the burial the pigeon hole is sealed and the name of the deceased person put on the outside, and we read on these tablets such names as Figueroa, Yorba, Sanchez, and many others that are familiar in the annals of California.

A very large species of vulture is the scavenger of this city. They fly around in the most familiar way by the thousands. The rubbish and garbage in the street is swept up in piles and I noticed a man with a garbage wagon shoveling it, and beneath his shovel, before he could get it away, there would be three or four vultures picking up the delicate morsels that remained. There were also a great number of them on the garbage wagon. One of our number who stopped in the same hotel we did, when he awoke in the morning, found a big vulture sitting in his window. The man thought he was getting into a pretty advanced state when the vultures were sitting around waiting for him to die.

The financial system of the country

is in a bad way. It takes \$17.00 of their money to equal \$1.00 of American money. Dr. West Hughes and myself had an automobile for about two and one-half hours and when we came to pay for it, it was about \$125.00, which we figured out was really \$7.50. A little boy come along to polish our shoes and it was fifty cents. We gave him a dollar and he thought he was getting munificently paid. The large and delicious pine-apples could be purchased for a half dollar, which is three cents each of our money. They had a flavor and delicacy that we never get in the pine-apples of the United States. Bananas and Mangoes were also very plentiful and delicious.

Guatemala City is situated in the midst of a beautiful fertile valley and nature has done everything in the way of climate, scenery and fertility of soil to make this a desirable city. The greatest lack is a good system of sanitation. Guatemala City is called the Paris of Central America. Let the Government once establish a thorough system of sanitation and the natural attractions of the city and country will draw many thousands of visitors annually.

Early on Monday morning we took our train back for the Port of San Jose. Everybody was happy and delighted, all feeling well paid for this trip in Central America, and all being glad to turn their faces homeward.

At San Jose we were again basketed and swung into our places. Dr. H. G. Brainerd, Dr. Geo. L. Cole and Dr. E. W. Pallette of Los Angeles, and Dr. E. O. Palmer of Hollywood, were all put in the basket together and their performance received great applause as they were safely swung into the bottom of the old scow. W. L.

"HELIO THERAPY IN SURGICAL TUBERCULOSIS."

In reading the report of Dr. Gertrude Austin of her visit to Dr. Rollier's

Sanitarium at Leysin, Switzerland, surprise and incredulity are almost alike aroused.

Even in the minds of Californians it excites surprise to be told that children can and do spend hours out of doors, absolutely without any clothing, and in winter, at an elevation of 5000 feet in Switzerland and yet that is what Dr. Rollier is doing, and at the same time getting remarkable results in the treatment of surgical tuberculosis of the bones, joints, lymph nodes, peritoneum and genito urinary organs.

The sanitarium at Leysin at an altitude of 5000 feet is above the clouds and that condition is sought to secure dryness, as well as heat of the direct rays of the sun.

It is claimed that experiment shows that 25 percentum of the sun's rays is absorbed by atmospheric dust and moisture before they reach sea level, and that at 15,800 feet (Mount Blanc) only 6 percentum is so absorbed.

The Leysin sanitarium faces directly south, the windows of the wards reach the floor and open directly upon galleries which have no covering. Dr. Austin's visit was in January. At that time as soon as the sun appeared over the mountain the beds in which the children were, were pushed out upon the gallery. The children "themselves, when able to do so, the moment the word is given, push down the bed clothes, and pull up and over their heads the night dress that is obligatory at other times," and they remain in bed on the galleries, "as naked as they were born, all day until the cool night air begins to make itself felt."

The complete exposures of the body are established gradually. The first day the exposure of the seat of disease is exposed for 5 minutes only. The second for two periods of 5 minutes each, 30 minutes apart; on the third day 20 to 30 minutes, and by steady progression up to the complete exposure all of the day. The article is illus-

trated with reproductions of a number of photographs which tell the story of results more eloquently than words can. Not the least impressive of these pictures is one of 10 naked children on beds out doors on a roofless gallery before which stretch snow fields for miles.

Dr. Austin reports the following statistics: 369 cases of surgical tuberculosis, recovery in 284 or 78%; improvement in 48; stationary 21; fatal 16 or 4%.

Pott's disease (19 with abscesses, 10 with fistulae and secondary infection,) 45 recoveries, 10 improvements, 3 failures and 3 deaths. In coxalgia with and without abscesses, 32 recoveries, 5 improvements and no deaths, and 22 cases with secondary infection, 12 recoveries, 4 improvements and 3 deaths. Closed tuberculosis of the pelvic bones, 5 recoveries and 2 improvements, but the same with secondary infection, 5 cases, 1 recovery and 3 deaths. Peritonitis and enteritis, 5 with fistulae, 17 recoveries, 3 improvements and 3 deaths. Renal and visceral forms, 16 cases, 12 recoveries, 2 improvements, 2 deaths. Genital forms 6 cases, all recoveries.

These results which are much more favorable than other methods secure, were secured by heliotherapy and general regimen.

Dr. Rollier has to refuse applicants daily, because of lack of accommodations.

An important measure in the general management is keeping the windows of the sleeping rooms constantly open, and warming the rooms by artificial heat whenever needed.

An observation of interest is the fact that recoveries are much more prompt in children who become intensely tanned, and that fair children pigment much less than dark-skinned children, and are much more disposed to tubercular infection.

Dr. Austin's article is in the Medical Record 6-8-'12. E.W.

TUBERCULOSIS OF THE SPLEEN.

M. C. Winternitz, of Baltimore, contributes an excellent paper on this subject, published in the Archives of Internal Medicine, June 15, 1912. Fifty-one cases from the literature are tabulated, from which the following summary is deduced:

So-called primary tuberculosis of the spleen occurs most frequently between the ages of 20 and 40, but may occur at any age, the limits being one year for the youngest and 80 years for the oldest individual.

It is equally distributed between males and females.

The onset of the disease is characterized either by pain or tumor or both in the splenic region (over 70 per cent.) In a few instances these symptoms are associated with gastric or respiratory disturbances, loss of weight, weakness or lassitude. These cases, as a rule, have a chronic course. In contrast to the above group there is another in which the symptoms of onset are much more striking and characteristic of an acute infectious process. These have the following symptoms-complex: collapse, fever, chills, backache, etc., and run an acute course. There remains still another group in which the symptoms of onset and the course are intermediary between the above groups.

The blood picture is very inconstant. Both the red and white cells may be normal, increased or decreased.

The skin may be normal, pale, cyanotic, or icteric. Purpura or ecchymoses also may occur.

Death invariably follows if the spleen is not removed. In the cases in which splenectomy was performed, the results are remarkable; 59 per cent. recovered.

The spleen may be tremendously in-

creased in size and weight. In the majority it weighs between 1000 and 2000 gm.

It may be studded with miliary or conglomerate tubercles or with large caseous masses even as large as an orange. These may soften and leave cysts lined with caseous material, or they may be partly or completely healed.

In 80 per cent. of the cases in which the liver was examined it shows tuberculosis. In 57 per cent. of the cases in which the glands were examined, more or less tubercular glandular involvement was found.

In 40 per cent. of the cases examined the lungs showed evidence of tuberculosis. In 16 per cent. there were healed nodules, while in 24 per cent. the process was still active.

Tuberculosis was found elsewhere in 66 per cent. of the cases. Only one case showed the tuberculosis to be confined to the spleen and in three cases, only the spleen and liver were involved.

A LEVEL-HEADED MAYOR.

The following is from the Los Angeles Municipal Evening News, and is reproduced here because it meets our approval:

"It will make no difference to me who asks for the resignation of Dr. L. M. Powers," said Mayor Alexander decisively. "Dr. Powers is an honest, capable and conscientious health commissioner and he stays on the job."

This statement was made by the mayor when he learned that the United Milk Producers Association had denounced Dr. Powers for his stand on the tuberculin test ordinance and would ask the mayor to ask Dr. Powers for his resignation.

The agitation to officially decapitate Dr. Powers began at a meeting of the association following the defeat of the tuberculin test ordinance. The mem-

bers of the association expressed their gratification at the outcome of the election on that subject and adopted a resolution to the effect that they would bring the quality of their milk to a high standard and keep it there without the necessity for an ordinance.

WILL CONTINUE TO FIGHT.

When Dr. Powers heard of this resolution he smiled skeptically.

"They fought us with falsehoods in the campaign for the tuberculin ordinance, so I have not much confidence in what they say," said the health commissioner. "Many of these same people who used such unfair methods to defeat the ordinance are the ones who opposed us so vigorously when we were trying to make them stop putting formaline in milk. We had to fight them four or five years on that subject and not until we got a judge courageous enough to punish them severely did we stop it. But now there is no formaline in the milk sold in this city and has not been for several years. It will be the same with the tuberculin test. We will have to keep at it until we get it, but until we do Los Angeles will be ten years behind other progressive cities."

SOME OF SENATOR WORKS' CONTORTIONS.

Senator Works' Senate speech, attacking physicians and practically everything that is scientific, has been sent broadcast with the following misleading frontispiece:

"Jesus of Nazareth was persecuted and finally crucified for preaching the Gospel and practising His religious belief by healing the sick. To do the same today in the twentieth century in the great State of New York, if He were here, would make Him a criminal subject to fine and imprisonment by the laws of that State."

This is misleading, in the first place, because there is not a word of truth

in it. Though Jesus of Nazareth was persecuted and finally crucified, it was not for preaching the Gospel and practicing His religious belief by healing the sick, as our perverse Senator would have us believe. Furthermore, to do the same in New York to-day, would not make Him a criminal, as anyone familiar with the laws of New York very well knows. Space would not permit a review of the entire speech, nor would it be worth while. Everybody in this region knows the value of utterances of Senator Works upon medical or scientific matters.

SAVE THE FOOLISH.

The following, from an editorial in the Ohio State Medical Journal struck our editorial eye just at the psychological moment, while we were thinking of the anti-vaccination movement, to which this refers:

"There often comes a certain feeling of exasperation in these struggles, and one is tempted to let the public suffer for its own ignorance and foolishness, but it is usually the helpless and innocent children that suffer the most; even if this were not so, we must strive to save even the foolish from the effects of their own folly.

One feature to be regretted is that in this instance so often, men of supposed intelligence and education are among the foremost antagonists. Men who would not presume to give opinions along other lines without investigations, do not hesitate to do so in medical subjects. They do not believe in germs—ergo there are no germs! They do not believe in vaccination, just as many similar minds in days gone by refused to believe in Newton's law of gravitation, or in Lister's theory of sepsis, but apples continue to fall and under antiseptics operative infection is vanishing more and more. Truth will prevail in the end, but it is our duty to aid its progress."

EXPERIMENTAL AND EPIDEMIOLOGICAL THOUGHTS ON PHTHISIS.

Under this caption, Paul H. Romer, in the *Berliner klinische Wochenschrift*, April 15, 1912, presents the following:

1. In the localities in which tuberculosis is very prevalent, nearly every man enters adult life, with a severe tuberculous infection.

2. Tuberculous animals are relatively immune against reinfection with tubercle bacilli.

3. Tuberculous man is relatively immune against repeated infections with tubercle bacilli.

4. The mortality from tuberculosis is greater among people living in a locality where tuberculosis is not prevalent.

5. Phthisis occurs through great autoreinfection of an organism which has been infected since childhood and is therefore relatively immune.

SCIENCE VERSUS COMMERCIALISM.

Some comment has been caused by the respective locations and arrangements of the scientific and commercial exhibits at the Atlantic meeting of the American Medical Association. The scientific exhibit was hard to find and poorly advertised. Access was gained by a narrow stairway in one corner of the exhibition and headquarters building, the exhibit occupying upstairs quarters that were none too light. On the other hand, the commercial exhibit occupied excellent quarters on the main floor. All of which seems to indicate the important part played by commercialism.

A WORTHY CHOICE.

We are glad to note the unanimous election of Dr. John A. Witherspoon, of Nashville, Tenn., as president of the American Medical Association. Dr. Witherspoon's oratorical ability well

fits him for many of the modern demands made upon the president of our national Association, and more important, his most excellent common sense well qualifies him for that position. It is appropriate that an internist should be chosen this year, and we are glad that he hails from Tennessee and is named Witherspoon. By the way, why wouldn't Lookout Mountain be a good meeting place for the Association? We understand that Nashville now boasts of ample accommodations for the entertainment of the American Medical Association.

AMERICAN PIE.

The New York Medical Journal has come to the editorial rescue of the American PIE. We give only the last paragraph:

"In a scientific journal discussion of the golden splendor of custard pie, or of the solid worth and respectability of mince pie (another complete meal) would be out of place, as well as tributes to other excellent varieties. But no physician need eliminate pie from the diet list of any patient to whom he allows fats and starches, if he will but counsel judicious mastication, and call the patient's attention to its highly nutritious qualities, which demand that it be led up to by great moderation in the earlier courses of the meal of which it thus becomes the crown and glory."

GOOD DON'TS FOR BATHERS.

Dr. George J. Fisher, of New York, head of the physical department of the

International Commission of the Y. M. C. A., has prepared the following list of don'ts for bathers:

Don't stay in the ocean more than 15 minutes.

Don't remain in a tank more than 20 minutes.

Don't bathe after eating.

Don't dive if your heart is weak.

Don't take chances in going into deep water if you can't swim.

Don't fail to learn the "crawl stroke."

Don't bathe in cold water if a chill follows.

Don't go in the water if you are fatigued. Cramps follow.

PROPHYLAXIS OF COLDS.

Dartmouth College, under the medical directorship of Dr. Howard Nelson Kingsford, has entered into the bacteriological examination of the air of halls and recitation rooms. If the culture material in Petri dishes show more than thirty-five colonies to a dish, the room or hall is disinfected with formaldehyde. Since 1907, when this method was adopted, there has been a reduction by nearly one half in the number of minor respiratory infections reported among the students. This method is logical and practical and deserves wider adoption.

MANY RECEIVE MEDICAL CHARITY.

According to the Boston Medical and Surgical Journal in Boston last year nearly 225,000 persons were recipients of medical charity. It is estimated that 45% of the cities of Boston, Chicago and New York are receiving dispensary aid.

EDITORIAL NOTES

Doctor Beverley MacMonagle of San Francisco passed away in Paris, May 22.

Dr. C. P. Shaffer, formerly of Reedley, Cal., has located at 517 N. Curtis St., Alhambra.

Dr. A. D. Long has succeeded Dr. F. J. Smith as head of the health and development of the public schools of San Diego.

Old shoes and rice. Della Incline of the class of '08 and Dr. R. Mason

were married June 5, 1912. Here's luck to them.

Dr. James L. Wilson, formerly of Bisbee, has been appointed chief of the sanitary brigade of the rebel army in the state of Chihuahua, Mexico.

Dr. Edward S. Godfrey, of Phoenix, has been selected as chief examining surgeon of the Mutual Life Insurance Company, for the state of Arizona.

Dr. M. L. Toland, formerly of Los Angeles, has removed to Pomona, where he will be associated with his son, Dr. C. G. Toland, 276 North Garey Avenue.

Dr. Powers is having the school nurses of the Health Department, scour the city for unreported births. Here's hoping that this may increase the birth record of Los Angeles. By the way, Doctor, do you know of any unreported births?

A physicians' club has been organized at Long Beach. It is a sort of inter-denominational affair, composed of regulars, homeopaths and eclectics. The officers are: Dr. E. R. Freeman, president; Dr. T. L. Rogers, secretary-treasurer. Social meetings will be held monthly.

The Los Angeles health department has been making investigations of the condition of fruit sold in Los Angeles. A city sanitary law governing the inspection of soft fruit is proposed, which will obviate much of the red tape necessary in the enforcement of the state law.

It took the jury twelve minutes to decide in the Doctor's favor in the suit of R. A. Shonlee against Dr. G. A. Shank of Huntington Beach, asking \$15,000.00 damages on the alleged carelessness of the Doctor in caring for Mrs. Shank. Wonder why they were out so long.

Dr. John R. Haynes, of Los Angeles, attended, as delegate from the California State Board of Charities, the recent

meeting in Cleveland of the National Conference of Charities and Correction. The Doctor delivered an address on The Economic and Sociological Conditions in European Cities.

At the last meeting of the California Homeopathic Medical Society at Sacramento a resolution was adopted endorsing the tuberculin testing of dairy herds. The resolution characterized as foolish the arguments of the anti-tuberculin men, in as much as they claim that the tuberculous milk is not injurious to children.

Dr. S. Adolphus Knopf, 16 W. 95th St., New York City, gave an oration on Medicine at the recent annual meeting of the Illinois State Medical Society. The meeting was held in historic Springfield, and Dr. Knopf's address was received with great interest.

The Loma Linda College of Medical Evangelists has just completed and equipped a new laboratory.

Introduction to a paper on Extra-uterine Pregnancy: "In choosing the subject of Extra-uterine Pregnancy, I have been influenced largely by the fact that the majority of cases of extra-uterine pregnancy I have operated on have been referred to me as cases of appendicitis."—Floyd W. McRae, of Atlanta, in the Journal-Record of Medicine. Moral: Think of extra-uterine pregnancy in the female before making a diagnosis of appendicitis.

Death has claimed Dr. Chester Rowell, mayor of Fresno, for many years a regent of the University of California. The Doctor was born in Woodsville, Va., in 1844, and graduated in medicine at Knox University, Galesburg. He founded the Fresno Republican in 1876, in which publication he had an interest at the time of his death. The doctor served three terms as State Senator, was appointed to the state board of health in 1880, was a presidential elector in 1894, and became mayor of Fresno in 1899.

MISCELLANEOUS

MR. FRANCIS VS. THE LOS ANGELES SOCIETY FOR THE STUDY AND PREVENTION OF TUBERCULOSIS.

Motion pictures dealing with health subjects have been presented in the Los Angeles schools and moving picture theatres through the joint co-operation of the Los Angeles County Medical Association and the Los Angeles Society for the Study and Prevention of Tuberculosis. Such education regarding matters of health did not meet the approval of those newspapers controlled by Mr. Earl, a christian scientist. The Tribune published articles both as news and editorials, that could not well be equaled in the flights of reporterly imagination exhibited in an attempt to give an improper impression of the excellent work being done by these Societies. For instance, the Earl description of "The Awakening of John Bond," one of the pictures shown, was such as to lead one to believe that all that is horrible is shown in that excellent drama, which is really one of the most charming films that has any bearing upon the tuberculosis problem.

Some of the correspondence between Superintendent Francis and the Society is illuminating:

June 14, 1912.

Dear Mr. Francis:

Before Dr. Kress left for Europe he sent a communication to you and also to the Board of Education regarding the exhibition in the schools of motion pictures dealing with health subjects, to be presented through the joint co-operation of the Los Angeles County Medical Association and the Los Angeles Society for the Study and Prevention of Tuberculosis. Later I called upon you and explained that the Los Angeles Society for the Study and Prevention of Tuberculosis was interested in this matter chiefly because it would enable us to distribute an immense amount of literature. Afterwards I called you up by phone and asked if

the matter had been brought before the Board of Education. You told me you were not sure whether you had presented it to them or not, but at any rate to go ahead. Upon this assurance we sent out to the schools about 100,000 souvenir programs, the distribution being based upon figures given by one of your assistants, indicating the number of pupils in the various schools to whom it would be proper to show these pictures. This souvenir program contains a short description of the various health dramas, and also contains the literature upon tuberculosis that this society sent to the public school teachers last fall. It was possible to show these motion pictures at only a comparatively small number of the schools and we have arranged to show them at the Temple Auditorium Saturday forenoon and afternoon, June 15th. This, of course, is a free entertainment at the expense of these societies. Incidentally, it is the first time that all of these motion pictures have been shown without an admission fee being charged. When I telephoned you that we would be willing to show these pictures at the Temple Auditorium you told me that you would extend an invitation to the schools through your circular letter. Some days ago one of your clerks called me up over the telephone and asked whether I had a **written*** permit to distribute literature through the schools. I told her that we only had your permission given over the telephone and asked whether the distribution of these programs was causing you any trouble. She then connected me with you and you asked who was back of this movement. I told you that it was being done through the joint co-operation of the Los Angeles County Medical Association and the Los Angeles Society for the Study and Prevention of Tuberculosis. You told me then that it was alright and that you would order the programs distributed to the older children, since the younger ones would only litter up the schools with them. I told you this would be satisfactory to us.

Wednesday noon we were surprised to receive a telephone call from your

*The word "written" was distinctly emphasized.

office, stating that the souvenir programs in the public schools had not been distributed, and that you would issue an order to have them destroyed if we did not promptly remove them. We took it for granted that you must have taken this action because of considerable pressure being brought to bear by those who are against practically everything medical and scientific. So we sent out a number of circular letters to prominent people, urging them to use their influence to secure the distribution of these programs. Our society went to considerable expense in this educational propaganda and was induced to do so largely by the prospect of distributing literature that they believe to be helpful in the prevention of tuberculosis. The school has received the benefit of the motion pictures shown at our expense, and it seems to us that it is only a matter of justice that you should direct that these programs be distributed.

Awaiting your pleasure in the matter, we are

Sincerely yours,

THE LOS ANGELES SOCIETY FOR
THE STUDY AND PREVENTION OF
TUBERCULOSIS

Geo. E. Malsbary, Secretary
501 Auditorium Bldg.

The substance of this letter is now supported by three affidavits. Wednesday afternoon, June 12th, after the unpleasant telephone surprise from the Superintendent's office, the Society sent out three thousand copies of the following letter to prominent business men:

June 12, 1912.

Dear Friend:

Through the joint co-operation of the Los Angeles Medical Association and the Los Angeles Society for the Study and Prevention of Tuberculosis, an arrangement was entered into with the General Film Exchange for the presentation to the Schools of moving pictures dealing with health subjects. It has been made possible to show these pictures in only a small number of the schools since most of the Schools have not accommodations for such work. In order to reach the other Schools these Societies have arranged to show the pictures in the Temple Auditorium, Fifth and Olive Streets, Saturday forenoon and afternoon, June fifteenth. To this exhibition no admission fee will be charged. The Societies extend an invitation to the children, their parents and friends. In connection with these

pictures, the Los Angeles Society for the Study and Prevention of Tuberculosis has issued a Souvenir Program giving a brief description of the moving pictures dealing with health subjects and also containing the tuberculosis literature furnished the teachers in the Public Schools last fall. Part of these programs have been distributed, but we understand that a large portion of them remain untouched in the various school buildings. Will you kindly help us see that they will be properly distributed, as your part in this health educational propaganda? The Superintendent promised over the telephone to have these distributed, but it has not been attended to, and we have received word from his office that the programs will be destroyed if we do not send for them. This would mean the loss of considerable money to our Society and a failure to accomplish a great amount of good. Please phone at once to Mr. Francis, Home Phone 10553.

This whole movement is so altruistic that it deserves your support.

Sincerely yours,

THE LOS ANGELES SOCIETY FOR
THE STUDY AND PREVENTION OF
TUBERCULOSIS

Geo. E. Malsbary, Secretary
501 Auditorium Bldg.

June 15, 1912.

Los Angeles Society for Study and Prevention of Tuberculosis, 509 Auditorium Bldg., City.

Gentlemen:

On your request, and at my recommendation, the Board of Education consented to the showing of moving pictures dealing with health subjects in our schools that had auditoriums suited to this purpose. In the letter, copy of which immediately follows, I notified your Secretary to that effect:

"My Dear Dr. Malsbary:

"I am presenting to the Board of Education your offer to furnish moving picture demonstrations on health to our public school children, and am recommending that they take advantage of the same. There are only a limited number of schools in which moving pictures could be shown during the day, as but few of them are equipped for lantern work in daytime."

I did not consent in this letter, nor, to the best of my knowledge otherwise, to the distribution of the souvenir program in our public schools, and was not aware that they had been sent to the schools until notified by some of the principals receiving them.

There are strong grounds against the distribution to public school children of any literature other than that prepared by the Board of Education, and it is rarely if ever done. In addition to this I personally believe that the pictures on the back of the souvenir program are an illustration of bad pedagogy. For these two reasons I asked the principals seeking information in this office, not to distribute the circulars until further instructed. This I did wholly upon my own initiative, before any member of the Board had spoken to me concerning the matter. These circulars should not have been sent to the public schools without permission from this office, and I take the full responsibility for having ordered the distribution stopped.

Yours very truly,

(Dictated) J. H. FRANCIS,
Superintendent.

This was the first intimation the Society had that there was any objection to its cartoons. They are reproduced herewith. They were sent to the pupils and also to the friends of the Society in its literature last fall. These cartoons were published in the Times, with the statement that they were used by the New York Department of Health as a banner and freely used as literature, and were sent to the International Congress on Tuberculosis, where they received honorable mention for their pedagogic value.

June 24, 1912.

Dr. George Malsbary,
Secy. of Anti-Tuberculosis Society,
Auditorium Bldg., City.

My Dear Sir:

At a meeting of the Board of Education, held on the 20th inst., the following action, concerning the showing of moving pictures on health sub-

jects, in the schools, was taken;* and you will please refrain from showing such pictures, in the future:

"In view of the statement of the Superintendent, that the moving pictures shown by the Society for the Study and Prevention of Tuberculosis and the Los Angeles Medical Association are contrary to modern ideals of pedagogy, be it resolved that we revoke permission to show these pictures in the school auditoriums, and that these two societies be informed of this action of the Board." Unanimously adopted.

Yours very truly,

J. H. FRANCIS,
Superintendent.

June 28, 1912.

Mr. J. H. Francis,
Supt. of the Los Angeles
City Schools.

Dear Sir:

Your letter of the 24th inst. was duly received. In it you stated that the action of the Board of Education revoking permission to show moving pictures in the schools was based upon your statement that the pictures shown by the Los Angeles Society for the Study and Prevention of Tuberculosis and the Los Angeles Medical Association are contrary to modern ideals of pedagogy. Will you kindly let us know in detail the pictures that are objectionable and in what way they do not meet your ideals. If you had taken this matter up directly with us we would have given you *carte blanche* in the selection of the films. It seems to us that both you and the Board have been very ungracious in your acceptance of the efforts of these societies to co-operate with you.

Sincerely yours,

THE LOS ANGELES SOCIETY FOR
THE STUDY AND PREVENTION OF
TUBERCULOSIS

Geo. E. Malsbary, Secretary
501 Auditorium Bldg.

June 23, 1912.

Society for the Study and Prevention
of Tuberculosis.

Los Angeles, California.

Dear Sirs:

I am in receipt of your circular letter

*This action of the Board was uncalled for, save to indicate its feeling and tendencies. The Society had already shown the pictures in the schools, as far as the funds at its disposal for this purpose would permit. Moreover, the schools had closed at the time this action was taken.

THE STORY OF TUBERCULOSIS—BRIEFLY TOLD IN PICTURE

HOW THE GERMS OF CONSUMPTION ARE CARRIED FROM THE SICK TO THE WELL



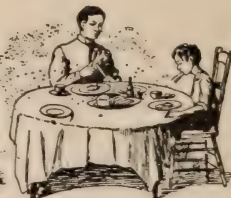
CONSUMPTIVE SPITTING ON FLOOR.
FLIES FEEDING ON IT, CARRY THE
GERMS OF THE DISEASE TO FOOD.



THE SPIT DRIES AND CARELESS
SWEEPING, DUSTING OR DRAUGHTS
CAUSE THE GERMS TO FLOAT IN THE AIR.



THE GERMS MAY ENTER
THE BODIES OF CHILDREN
PLAYING ON THE FLOOR,
THROUGH SORES OR WOUNDS.



OTHERS MAY GET THE DISEASE BY BREATHING
OR SWALLOWING THE GERMS.
SPRAY GIVEN OFF IN SNEEZING OR COUGHING,
CONTAINS GERMS IN A MOIST AND ACTIVE STATE.



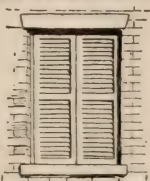
PUTTING FOOD, MONEY, PENCILS, ETC.
INTO THE MOUTH AFTER A CONSUMPTIVE
HAS POISONED THEM WITH HIS SPIT.

NEW YORK STATE DEPARTMENT OF HEALTH.

CONSUMPTIONS ALLIES—AVOID THEM AND YOU ARE SAFEGUARDING AGAINST THE DISEASE



INTEMPERANCE AND
OTHER EXCESSES.



THE CLOSED WINDOW.



OVERWORK.



CROWDED SLEEPING
LIVING AND WORKING ROOMS.



SMOKE AND DUST.



MOUTH BREATHING
OFTEN DUE TO ADRENAL

NEW YORK STATE DEPARTMENT OF HEALTH.

IN CASE OF CONSUMPTION, LOOK TO THESE FOR CURE



THE DOCTOR.



SUNLIGHT.



OUT-DOOR AIR.



GOOD FOOD.



REST.

NEW YORK STATE DEPARTMENT OF HEALTH.

A CAREFUL CONSUMPTIVE.—NOT DANGEROUS TO LIVE WITH.



COUGHS, SPITS AND
SNEEZES INTO
PAPER OR CLOTH,—



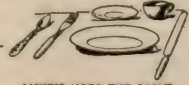
BURNS OR BOILS IT
BEFORE IT DRIES,—



OR PUTS IT INTO
A DISINFECTANT,—



WASHES HER HANDS
BEFORE AND AFTER EATING—



ALWAYS USES THE SAME
DISHES AND BOILS THEM
IN WATER BEFORE WASHING
WITH OTHER DISHES,—



AND SLEEPS A

(NEW YORK STATE DEPARTMENT OF HEALTH)

or the 12th instant, asking me to help your movement to distribute health educational literature and particularly to aid in presenting to the children of Los Angeles, through moving pictures, information about tuberculosis and other diseases.

I have noticed in one of the newspapers in Los Angeles the extent to which you have gone in this direction, and my judgment is that the good people of Los Angeles, instead of encouraging any such movement as you are engaged in, should see that you are prosecuted for cruelty to young children.

Very truly yours,

JOHN D. WORKS.

June 29, 1912

Mr. John D. Works,
City.

Dear Sir:

The circular letter, referred to in your communication of the 23rd instant, was sent to a number of the friends of this Society, and your name was inadvertently included in the list.

Your truly,

THE LOS ANGELES SOCIETY FOR
THE STUDY AND PREVENTION OF
TUBERCULOSIS

Geo. E. Malsbary, Secretary

501 Auditorium Bldg.

One of the members of the Board of Education, Mr. Steadman, declared that they must not lose sight of the fact that some ten thousand citizens of Los Angeles are christian scientists. The Secretary replied that it would be well for the Board to also remember that the Society is in personal communication with over seven thousand of its friends, and proposes to increase the size of this list. Upon the assurance by Mr. Steadman and Mr. Frank, that the Board of Education would not be influenced by any evidence that the Society might produce, and that the Board would stand by the Superintendent in whatever he did, no representative of the Society appeared before the Board.

But there is such a thing as public opinion. The Society now finds that most of the programs have been distributed, a few have been destroyed, and there are almost none remaining. It would be absurd for Los Angeles to

be governed by these individuals holding peculiar beliefs opposed to modern hygiene and preventive medicine, even though they be ten thousand strong.

MEDICAL COLLEGE COMMENCEMENTS.

THE COLLEGE OF PHYSICIANS AND SURGEONS.

The twenty-ninth annual commencement of the University of Southern California was held June 20th, 1912, in the Temple Auditorium, Los Angeles. Some 3,000 people witnessed the graduation of more than 300 students. A prominent feature of the exercise was the commencement, address delivered by the Rev. Charles Aked D. D., pastor of the First Congregational church of San Francisco, formerly pastor of what is commonly known as the Rockefeller church. Doctor Aked took for the subject of his address "The Moral Equivalent of War." He said in part:

"You are all prize winners in life's game now, and I wish you all success. But first choose carefully the prizes which are worth winning and remember that fame and fortune are only incidental. The heroic in life, appealing universally as the pulsating throb of the war drum has done heretofore, will bring the great prize—will augment us men and women with the divine. Make up your mind as to which one you want of all the prizes life offers. Like your work first and the pay afterwards.

"Look at the martyrs to science. They sacrificed their lives for the benefit of their fellowmen. The man that throws his life away in the interest of his fellowman saves it for life eternal.

"There is no one among us who can attain the deepest happiness of which his nature is capable, who can be the man he ought to be, until he has found for himself the moral equivalent of war. The equivalent of war is some-

thing heroic that will appeal to men and women.

"The man of science is no greater than the man on the street. There is no accident or disaster but furnishes men and women who die for the benefit of their fellowmen.

"War is barbarous. It is just as disgusting for a man to go out and shoot another as it is for one man to eat another like the cannibals. The man today that says 'There always was war and there always will be' has stood still while the world has gone by and around him."

The following graduates in medicine received their diplomas:

Francis Xavier Ammann, Jr., John Ira Boyer, Vernon Claude Charleston, Isaac Frederick Clark, Egert Calerb Collins, Edgar Charles Davey, Stanley McClure Deakin, Homer John Flinn, Frank Alomzo Foye, William Ethelbert Hall, Ella Mercy Hart, Foster Miller Hull, Fred Howell Nelson, Fredrick William Muller, Gladys Emilia Patric, Irving Smith Platt, Richard Robert Ronan, Elliott Plummer Smart, Delos Packard Thurber, William Grant Thurber, Loren Everett Wilson, William Laurence Yager, Edgar Nelson Young.

UNIVERSITY OF CALIFORNIA.

Los Angeles Department College of Medicine.

The commencement was held Thursday June 20th, 1912, in the Barlow Medical Library, Los Angeles. The commencement address was delivered by Professor J. H. Francis, who chose as his subject, "The Physician: His Opportunity and Responsibility." The speaker began his discourse with an entreaty to those he addressed to forget themselves in the work in hand. He complimented the physicians upon educating the people upon medical matters. "The problem of the future is to keep people from getting sick,

keeping disease out of the body. The physicians of today must be sanitary engineers and medical educators. We must educate the young men and young women to respect their bodies, for today the young people know practically nothing about their bodies except what they have gathered from improper sources. The greatest field for opportunity and strength will lie with the young people. The greatest problem of the next quarter century will be the problem of Eugenics. That must be the great problem of the physician, along the line of education. The great secret of life is not how much we can accumulate but how much we can give to the world, how much we can contribute to the world's betterment."

The following were candidates for the degree of Doctor of Medicine:

Alvin Jay Bayley, Mona Eleanor Bettin, Oliver William Butler, Clarence Sumner Compton, Chesly Lightbourn Evans, Albert Osben Holmes, Norman Augustus Leake, Lawrence Ewald Lepper, Walter Emery Libby, Henry Michael McDonald, Carl Gedrem Reum, Harold Walter Rice, Adolphe Edward Roome, Jr., Clyde Earl Shank, Leonard Stovall, John C. Wilson.

LOCATION WANTED.

Physician, single, 28, California license, wishes position as assistant or partner to general practitioner in California. Four years successful general practice. Well qualified in surgery. Health good. Desire opportunity rather than great remuneration.

Address No. 123

c/o Southern California Practitioner.

Graduate Male Nurse wishes Institutional position. A-1 reference. Address, F. R. Mason, 920 W. 8th, Los Angeles.

BOOK REVIEWS

HANDBOOK TO MEDICAL EUROPE. A Ready Reference Book to the Universities, Hospitals, Clinics, Laboratories and General Medical Work of the Principal Cities of Europe. By James Henry Honan, M.D. Cloth. Price \$1.50. Pp. 261, with Maps of Berlin, Edinburgh, London and Paris. Philadelphia: P. Blakiston's Son & Co., 1912.

The object of this handbook is, in the author's words, "to give a concise, comprehensive outline of the medical work of Europe, as a guide to English-speaking physicians who go abroad for post-graduate work and as a book of reference for all who are interested in medical work in other lands."

His sixteen years' residence in that country has enabled him to give a full and interesting account, for Berlin especially, not only of university courses, but also of various institutions of medical interest, such as the state institute for the examination of foodstuffs, the open-air schools, the convalescent camps and works of public sanitation. About eighty pages are devoted to Great Britain, twenty-eight to Austria-Hungary, twelve to France, and twenty-five to the rest of Europe.

We heartily commend this book to all prospective medical visitors to European centers.

MASSAGE AND THE ORIGINAL SWEDISH MOVEMENTS. Their application to various diseases of the body. Lectures before the Training Schools for Nurses connected with the Hospital of the University of Pennsylvania, German Hospital, Woman's Hospital, Philadelphia Lying-in Charity Hospital, the Philadelphia Polyclinic and College for Graduates in Medicine, and the Kensington Hospital for Women, of Philadelphia. By Kurre W. Ostrom, from the Royal University of Upsala, Sweden. Seventh edition, revised and enlarged, with 115 illustrations. P. Blakiston's Son & Co., 1012 Walnut street, Philadelphia.

In this edition the following subjects have been added: Neuritis, Splanchnic neurasthenia, Infantile paralysis, and additions to Diseases of the Eye and Ear. The book is well illustrated, there being 115 illustrations in the 202 pages.

Some of the instructions do not seem above criticism. Thus, in the description of massage of the abdomen to act upon the smaller intestine, figure 18 describes the conventional concentric circles around the umbilicus. This does not correspond with the anatomic arrangement of the small intestine. After describing the manipulations employed in abdominal massage, the author states that "the operator should teach the patient how to perform them upon himself every morning particularly in cases of constipation." It seems to us this is questionable advice for general dissemination.

All in all, it is a most practical little volume. The price is \$1.00 net.

THE PRACTICAL MEDICINE SERIES, VOLUME I, GENERAL MEDICINE. Under the general editorial charge of Gustavus P. Head, M.D., Professor of Laryngology and Rhinology, Chicago Post-Graduate Medical School, and Charles L. Mix, A.M., M.D., Professor of Physical Diagnosis in the Northwestern University Medical School. This volume is edited by Frank Billings, M.S., M.D., Head of the Medical Department and Dean of the Faculty of Rush Medical College, Chicago, and J. H. Salisbury, A.M., M.D., Professor of Medicine, Chicago Clinical School. This volume is one of a series of ten issued at about monthly intervals, and covering the entire field of medicine and surgery. Each volume is complete for the year prior to its publication on the subject of which it treats. The price of this volume is \$1.50; the price of the series of ten volumes is \$10.

These are convenient little volumes, giving abstracts of the recent literature. It is unfortunate that they can not be brought more up to date. Thus, the present volume contains no abstracts of 1912 literature.

Volume II. General Surgery. This is a companion to the above volume. Edited by John B. Murphy, A.M., M.D., LL.D. This review of the surgical progress during the past year, emphasizes the rapid standardization of surgical technic, not only in America but throughout the world. The immediate

management of fresh wounds—compound fractures, joint lacerations, etc.,—is becoming that of non-interference except for the mechanical removal of traumatized infected zones. Simple fractures are very commonly plated either with the Lane or the Sherman vanadium steel bone plate, on the third or fourth day after the accident. No foreign body should be used to immobilize compound fractures. Among anesthetics, ether is increasing in popularity. It is less distressing to the patient when preceded by or associated with carbonic dioxide and oxygen. The growth of tissue in culture media is a real achievement. The vaccine treatment of metastatic arthritides, colon bacillus infections of the urinary tract, etc., are giving much promise. Striking results are being obtained in tetanus by the use of phenol. Much valuable work is being done in the study of cancer, especially as to its distribution and the blood tests.

A HANDBOOK OF PRACTICAL TREATMENT. In three volumes. By 82 eminent specialists. Edited by John H. Musser, M.D., Professor of Clinical Medicine, University of Pennsylvania; and A. O. J. Kelly, M.D., Late Assistant Professor of Medicine, University of Pennsylvania. Volume III: Octavo of 1095 pages, illustrated. Philadelphia and London; W. B. Saunders Company, 1912. Per volume: Cloth, \$6 net; Half Morocco, \$7.50 net.

This, the third volume of this great work, with the modest title of "A Handbook of Practical Treatment," is a welcome addition to the physician's works of reference. A number of articles are by John H. Musser himself, especially those pointing to pulmonary diseases and conditions. Dr. Musser is also the joint author with Piersol on the practical chapter on Constipation. Dr. Thomas B. Fletcher, Associate Professor of Medicine in the Johns Hopkins University, has a very instructive chapter on the Gout, in the course of which he says:

"Of the purin bodies, uric acid concerns us most in the consideration of the etiology of gout. The theory that

has long prevailed *that gout is due to the effects of an excess of uric acid in the system still holds good today*, notwithstanding attempts to discredit it. The investigation of the last few years have taught us much concerning the source of uric acid, and quite recent studies have revealed to us a great deal concerning the steps in its formation in the body under normal conditions. Burian and Schur were the first to use the terms 'exogenous' and 'endogenous' uric acid, now in common use in referring to the source of the acid. Exogenous uric acid is derived from the purins or nuclein ingested with the food, whereas the endogenous uric acid is derived from the destruction of the body purins or nuclein. The work of Jones and his associates, Partridge and Winternitz, in this country, and of Schittenhelm, in Germany, have shown that specific organic ferments play a vital part in the various stages in the formation of uric acid. . . .

"Normally, the blood contains minute quantities of uric acid. It does not circulate as free uric acid. It is not known with certainty in what form the acid actually exists in the blood. As stated, Roberts holds that it is as the very soluble quadriurate. This is disputed by many. Minkowski claims that it circulates in the blood in combination with the purin base, nucleotin phosphoric acid."

The chapter on the Diseases of the Intestine is by William A. Edwards, M.D., of Los Angeles. This chapter is eminently a practical one and in each disease Dr. Edwards gives under "Treatment" prescriptions together with a carefully prepared dietary.

The section by Dr. Edwards on Mucous Colic or Membranous Enteritis, to differentiate it from the true Colitis, the author says both are Mucous Colitis; one being the result of abnormal nerve supply, and the other a result of lesions within the colon. The treatment recom-

mended during an attack has for its object the relief of pain. This should be accomplished, if possible, without the use of opium, on account of its constipating effect, but a suppository containing codein, heroin or dionin in combination with belladonna will often suffice if accompanied by hot applications to the abdomen. During the interval between attacks the diet, the constipation, the neurosis and the complications must all receive their appropriate consideration. Arsenic in full doses is recommended, and may do good in some cases. There is a full diet table, in regard to which Dr. Edwards says it should be explained to the patient that we wish to use foods that leave a bulk residue, to stimulate the muscular coat of the intestines, because the diet is rather unattractive and it requires considerable pluck to adhere to it, year in and year out. If it is necessary to use purgative drugs, the milder laxatives should be selected. My preference is *Cascara Sagrada*.

My plan has been to wash out the colon with physiologic salt solution daily for perhaps a week, and then, in accord with Kussmaul and others, to use large enemas of pure olive oil in which the fatty acids have been removed by shaking with water. The enema is given at bedtime, allowed to slowly run into the colon, and is to be retained overnight, because portions of the bowel may not be reached by simple injection, owing to spasmodic contraction, and hard masses of fecal matter may be allowed to remain if simple water enemas are used; thus a constant irritation of the bowel persists.

Patients can retain 250 to 500 c.c. of this pure, nonirritating, acid-free olive oil.

Intestinal Indigestion is another condition that receives thorough consideration from Dr. Edwards. Also Acute Catarrhal Enteritis and, in fact, all of the conditions that would naturally come

under diseases of the Intestines appear in this chapter. This volume also contains excellent sections on the Urinary System, the Nervous System, and diseases of the Mind; each one of these subjects being in the hands of noted specialists.

HEMOGLOBINURIC FEVER. Isthmian Canal Commission. A report of Hemoglobinuric Fever in the Canal Zone. A study of its etiology and treatment. By W. E. Deeks, A.M., M.D., Chief of Medical Clinic, Ancon Hospital, C. Z., and W. M. James, M.D., Physician Ancon Hospital, C. Z. Published by the Department of Sanitation. I. C. C. Press, Quartermaster's Department, Mount Hope, C. Z. 177 pages.

The report contains also a synopsis of the cases from which the data were derived, and a discussion of the various hypotheses as to the etiology of the disease.

The history of hemoglobinuric fever proves that the symptomatology of the disease was recognized and recorded prior to the time when the malady was distinguished either as an entity or as a symptom-complex of malaria. There is no proof that blackwater fever has spread from one country to another, or from one part of a country to another, as have kala-azar, yellow fever, and sleeping sickness. On the contrary, the disease invariably manifests itself when certain conditions relative to the epidemiology of malaria, and to that of no other disease, are present. These conditions are:

1. The presence of a population non-immune against malaria.
2. The prevalence of malaria in such quantity as to produce an almost continuous infection in this population.
3. A large proportion of estivo-autumnal malaria; because the amount of blackwater fever is in direct proportion to the intensity of this variety.
4. The neglect of prompt and continued administration of quinine, especially in primary attacks, to persons non-immune against malaria.

In every locality, without exception, where these conditions obtain, hemoglobinuric fever is found.

The conditions may vary from time to time in the same or in different localities, with a corresponding increase or decrease in the amount of hemoglobinuric fever. They are present in restricted areas and absent from those contiguous. When any condition varies, hemoglobinuric fever varies in proportion. In this respect the malady differs from every infectious disease other than malaria, for it does not enter a hitherto non-malarial district except by the introduction of estivo-autumnal malaria; when this malaria becomes prevalent in a region formerly free, blackwater fever follows in proportion to the intensity of malaria and the capacity of the population to acquire immunity. Also, estivo-autumnal malaria may obtain very extensively among children when in places where the adult population, by reason of continued attacks in childhood, has acquired immunity. If non-immunes do not enter such places, or if, after entrance, prompt prophylactic and therapeutic measures are instituted against malaria, blackwater fever does not prevail.

These propositions are supported by positive evidence, and do not admit of controversy. Every statement made in support of them has concrete facts and the witness of authoritative observers as its basis. The conditions necessary for the generation of hemoglobinuric fever explain clearly why the disease is absent from places where it once prevailed, or is present in those from which it was formerly absent; why it occurs in some malarious countries and not in others; why it obtains in certain areas only in a malaria infected district; and why in restricted localities, or even in certain houses, the malady may present itself, while those adjacent are free.

Although the evidence associating hemoglobinuric fever with the presence of malarial parasites is circumstantial, since it relies in great part on the skill and experience of observers, it is none the less strong and authoritative, in actuality far more so than that which implies a lack of such association. Notwithstanding the reported absence in isolated instances of proof of malarial infection in blackwater fever during life or at autopsy, the connection between the two is not materially affected thereby; for when all circumstances of the relationship are considered in their entirety, the dependency of the latter

upon the former is manifested to an extent unparalleled in the etiology of infectious diseases. When to the epidemiological evidence of this relationship is added these proofs: that in no other malady is malarial infection so constantly present; that in malarious countries other diseases fail to show even an approximate amount of such infection; that mechanical and therapeutical measures instituted against malaria are equally efficient against hemoglobinuric fever; that prompt and efficient treatment against the one, no matter how greatly it obtains, is successful also in reducing the prevalence of the other; either the truth of the relationship as asserted must be admitted, or the existence of an organism dependent upon the conditions enumerated must be assumed. Such an assumption is not supported in biology, either by analogy or fact, unless some vague conjecture of an improbable symbiosis be so included.

Throughout our thesis we have referred to hemoglobinuric fever as a disease, or else have used a synonymous term. We have done this, partly in deference to the present custom, and partly to avoid ambiguity. In our opinion it is better to describe hemoglobinuric fever, as Marchiafava and Bignami have done, as "a syndrome which is encountered not rarely, especially in hot climates, in the course of a malarial infection." For, although medical usage may sanction in some instances the classification of different conditions dependent upon the same etiological factor as distinctive "diseases," there is no need for such application to the description of the hemoglobinuria and associated symptoms that "occur in the course of a malarial infection."

Unlike some writers, we do not find difficulty in calling blackwater fever a syndrome. It is not necessary to assume that all malarial infections of a certain intensity are followed by hemoglobinuria; because, for such determination an individual predisposition is necessary. In most cases, but not in all, this predisposition is enhanced by repeated attacks of malaria. That is why regions of the most intense malaria produce the most blackwater fever; for the chances of very susceptible persons becoming infected with malaria are thereby made certainties, while the likelihood of determining a predisposition in less susceptible persons is correspondingly increased. Except in localities where

malarial infection and repeated reinfection and relapses are continuous, hemoglobinuric fever is comparatively rare, but it is not more uncommon than are the comatose and algid types of malaria, or any one of the syndromes depending upon interference with the functioning of the nervous system, such as a paralysis or a neuritis. These, like hemoglobinuric fever, may occur at any time in the course of a malarial infection, especially in an untreated or improperly treated one, and do occur most often where malaria is most intense. Since it is not possible to predicate the amount of infection that results in the determination of any of these other malarial syndromes, otherwise than to say that they occur in proportion to the intensity of malaria, it is illogical to assert as some have done, that blackwater fever should invariably follow when a certain degree of personal malarial infection has been attained. One might as well say that every infection with *B. tuberculosis* is followed by the same symptoms; or that meningitis ensues when a certain number of the diplococci of pneumonia are present.

We know that when such organisms localize in certain parts of the body, definite symptoms follow, and we believe that under certain conditions the toxins of malarial poison produce hemolysis; but why some persons are thus acted upon while others with equal amounts of infection are not, is a problem that still awaits solution, nor does our lack of knowledge in this respect affect our cognizance of the primary cause.

The primary cause in hemoglobinuric fever, is either prior or coincident malaria, or both, the immediate cause is sometimes the administration of quinine, but this never acts unless the primary cause has been or is present. With this knowledge we are able to treat the syndrome intelligently, and often to prevent its occurrence, by the removal of the primary cause; and by sending away from the source of infection those who, since by reason of personal idiosyncrasy they cannot take quinine at any time without the production of blackwater fever, should not remain in a malarious country.

THERAPEUTICAL HINTS

THE EFFECTIVE TREATMENT OF CONSTIPATION.

Gradually the profession is beginning to realize that Prunoids offer the ideal treatment for all forms of constipation traceable to functional causes.

They produce their results by stimulating normal secretions, rapidly increasing the fluid content of the feces and gently increasing peristalsis. They are extremely palatable, easily taken by even young children, and when brought in contact with the secretions rapidly disintegrate and produce their specific medicinal effect.

Probably the most gratifying feature of Prunoids is what for lack of a better term may be called their remote effect. While prompt and decided catharsis follows their administration in six or eight hours, a mild and salutary laxative influence is observed for several

days after the final dose of Prunoids. Other Cathartic measures act just the reverse, and after their use the bowels invariably show greater lethargy and sluggishness.

FUNCTIONAL HEART DISEASE.

It has long been known that Cactina Pillets are especially serviceable in all functional disorders of the heart, as well as in certain phases of the common organic lesions.

They are safe, reliable, and do not manifest a cumulative action. Associated with digitalis, Cactina Pillets act as a valuable synergist, making possible the use of much smaller doses of digitalis in the production of desired effects.

As has been previously said, Cactina Pillets improve cardiac nutrition. Under its use the heart's action is

slowed and materially strengthened. No miraculous claims have ever been made for Cactina Pillets, but in suitable cases clinical experience has repeatedly demonstrated its extraordinary value as a persuasive tonic.

IN CONVALESCENCE FROM FEVERS.

In convalescence from febrile disorders Seng imparts a desirable tonicity to the alimentary structures, coaxing back the vital functions that have been sadly exhausted and depressed. Digestion, absorption and assimilation are substantially promoted, and gratifying improvement in the whole bodily condition follows as a natural sequence.

THE HAY-FEVER RIDDLE.

Despite the many therapeutic advances of recent years, "what to do for the hay-fever patient" continues to be something of a puzzle. The long-sought specific still eludes us. Nevertheless, the malady is not quite the enigma that it once was. Medication, if still empiric, is not ineffective. The symptoms of the disorder can be controlled or minimized; relief, though temporary in many cases, may be obtained; and for these blessings the afflicted patient and the sympathetic physician may well be thankful.

For use in the treatment of hay fever there is, of course, a long line of so-called available medicaments. One dependable agent which comes naturally to mind in this connection is Adrenalin. Indeed, it is doubtful if any other single medicinal substance has been so largely and successfully employed in the treatment of vasomotor rhinitis. As adapted to the needs of the hay-fever sufferer the product is available in a number of convenient forms, as Adrenalin Chloride Solution, Adrenalin Inhalant, Anesthone Cream, Anesthone Inhalant, Anesthone Tape, etc. The various solutions are used in spraying

the nares and pharynx, the cream for snuffing into the nostrils, the tape for packing the nostrils. All cases of hay fever, of course, are not amenable to the same form of treatment. It is a logical presumption, however, that a vast majority of them ought to yield to one or more of the preparations above referred to. The Adrenalin products, as is well known to most physicians, are manufactured by Parke, Davis & Co., who will doubtless be glad to send literature regarding them to any practitioner. Requests for printed matter may be addressed to the company at its main offices and laboratories in Detroit, Mich.

THE INSOMNIA OF ALCOHOLISM.

Of all the insomnias the most difficult to control is that of acute alcoholism. Not only is there wakefulness during the period of convalescence from the restless tossing to and fro, remorse, and gloomy anticipations of the future. In these cases the more recently discovered hypnotics do not reach the bottom of the trouble. Bromidia has a profound influence on the entire nervous system and exercises its sedative effect thereon before the actual hypnotic result is prolonged. The ultimate result is curative, for the effect on the brain and cord does not immediately wear off. Furthermore, far from causing anorexia, as similar agents are prone to do, Bromidia actually increases the appetite, a very valuable help in these cases where it is important to build up the system as soon as possible. In all alcoholic cases, the use of Bromidia is greatly to be preferred to the hypodermic injection of morphine, with its inevitable result of locking up the secretions, and its frequently disastrous action on the stomach. If opium must be used, a dose of Papine will accomplish what is desired without any of the bad effects of morphine.

DISCRIMINATION IN THE SELECTION OF BROMIDES.

A prominent physician recently said: "It is a mystery to me why bromide of potassium is so generally used by the profession. Its action is not nearly as reliable as the bromide of sodium, and better still is a combination of the bromides. For such a preparation I use Peacock's Bromides, as I know it is made of the purest salts, and the difference between its therapeutic action and that of the commercial salts is very great. I have used it for years and it is always reliable and staple. It is impossible to obtain satisfactory results in prescribing bromide of potassium, and thus I have depended on this preparation. I have also learned that it is necessary to see that my prescriptions for it be filled at a first class pharmacy."

The purity, uniformity and palatability of Peacock's Bromides, to say nothing of its exceptional quality, readily account for its broad acceptance as the standard bromide preparation.

THE CARELESS USE OF CATHARTICS.

The evil effects resulting from the indiscriminate use of cathartics and drastic purgatives is only too well known to every practitioner. Drastic cathartics, while producing the effect which the patient thinks is desirable, leave the secretory functions of the liver in an enfeebled and exhausted condition, so that a return to the constipated state is certain. In such conditions the physician will find Chionia a most valuable assistant, combining it with an occasional cathartic when indicated and gradually diminishing the dose of the cathartic employed. The administration of Chionia should be continued some time after the cathartic or purgative has been discontinued.

RECONSTRUCTION FOLLOWING TYPHOID FEVER.

In some instances the convalescence of typhoid fever presents a debility closely akin to a tuberculous predisposition, which indicates the need for more potent reconstructives than the stomachics and tonics usually employed for this purpose. This need is well met by Cord. Ext. Morrhuæ Comp. (Hagee.) Usually in these cases the blood stream is thin, the processes of metabolism are interfered with and the vital powers remain far below par. The tissues are easily susceptible to graver infections, such as tuberculosis. Cord. Ext. Ol. Morrhuæ Comp. (Hagee) will prove its worth as an up-builder in this class of cases, charging the blood current with nutritious elements and finally overcoming the debilitated state. Its palatability gives it added utility, a feature worthy of consideration in choosing remedial agents of this character.

THE VALUE OF AN EFFECTIVE ALTERATIVE IN NEURASTHENIA.

Nine-tenths of the cases of neurasthenia which present themselves are due to the blocking of the system with the products of malassimilation. It is not so much a tonic, and stimulant regime that these cases demand, although that is useful later on, as a course of treatment designed to wake up their lazy emunctories. Bowels, kidneys, liver, sweat glands, all require stimulation and Iodia is **par excellence** the remedy to produce this result. This sort of treatment will produce a feeling of exhilaration and renewed vigor in the patient more quickly than any regime based on strychnine or overfeeding.

A DEPENDABLE ANODYNE.

The uses of Papine are almost unlimited. In the main they are how-

ever diarrheal affections such as gastro-enteritis, cholera morbus and infantum dysentery; diseases of the nervous system attended with pain, such as neuralgia, neuritis, hysteria and locomotor ataxia; painful disorders of the utero-ovarian tract, as dysmenorrhea, uterine colic, ovarian neuralgia; and also other conditions attended with severe pain, such as billiary and renal colic, and the chest pains of pleurisy, pneumonia and tuberculosis. Papine has also been strongly recommended in the treatment of diabetes. This product has the great advantage that it can be used without locking up the secretions or inducing a habit, as is the unfortunate case with other opium preparations.

TREATMENT OF RHEUMATISM.

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Professor Davenport in his admirable work on the Diseases of Woman, Dr. L. G. Boyd, Tummelton, Ind., reviewing adds:

How can we prevent dysmenorrhea? It can be done by keeping the patient

under morphine, but this is a barbarous solution of an important problem. It in fact does not solve it. Morphine is inadmissible and improper in these cases. It produces derangement of the secretions and tends to establish a drug habit that will make life a burden. I have long employed a remedy that not only relieves the pain, but produces no habit and is not dangerous. I refer to Dioiviburnia. It is a most valuable uterine tonic, antispasmodic and anodyne of exceptional worth. I rely upon this remedy to prevent dysmenorrhea, which as Professor Davenport truly says is seen in almost all, if not in all women. I have my patients who suffer with dysmenorrhea to take Dioiviburnia, beginning two days before menstruation is due and persist in it until the period has passed. I give it in doses of one to two teaspoonfuls every three hours throughout this time. When this direction is followed I have found that my patients go through the period without pain. The adoption of this treatment I may say also, has brought me many grateful compliments.

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This information is desired for the purpose of organizing an Alumni Association of the Hospital.

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SOUTHERN CALIFORNIA PRACTITIONER

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Editor,

DR. GEO. E. MALSBARY.

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EPIDEMIC INFANTILE PARALYSIS.

Acute Anterior Poliomyelitis, Acute Atrophic Paralysis, Acute Atrophische Spinal lähmung, Spinale Kinderlähmung, Paralyse Atrophique.

GEORGE E. MALSBARY, M.D., AUTHOR OF PRACTICE OF MEDICINE, ETC.,
LOS ANGELES.

An infection, most common in childhood, characterized by the sudden paralysis of groups of muscles, followed by rapid wasting of the parts affected, reaction of degeneration, and deformity. The disease has been observed in adults under thirty, presenting the same clinical picture as in childhood, and necessitating differentiation especially from multiple neuritis. But the great majority of the reported cases have occurred in children, during the first three years of life, rarely after the fifth year or during the first six months. In contradistinction from cerebrospinal meningitis, infantile spinal paralysis shows a preference for the hot months, though other seasons are not exempt. The laity usually ascribe the symptoms to dentition, cold or traumatism.

Heine, 1840, wrote the first monograph, in which the symptoms of infantile paralysis were associated to constitute a separate disease. Cornil, 1863,

first observed the lesions in the spinal cord. Prevost and Vulpian, 1865, located the lesion in the anterior cornua. Duchenne, 1872, observed the affection also in adults.

Epidemic and endemic outbreaks have been recorded by:—

Colmer, Amer. Jour. Med. Sciences, 1843.

Cordier, Lyon Medicale, 1888.

Medin, Hygiene, 1890.

Leegard, Neurolog. Centralblatt, 1890.

Calverly, N. Y. Med. Jour., 1894.

Altman, Australian Med. Gaz., 1897.

Harbitz, Jour. A. M. A., Oct. 26, 1907.

Medin, 1887, reported an epidemic in Stockholm with some fatal cases. Cav-
erly, 1894, observed an epidemic in
Rutland, Va., in which 132 cases were
reported with 18 deaths. In that epi-
demic, most of the cases occurred in
strong, healthy children. It was ob-
served that horses, dogs and fowls be-
came paralyzed; autopsy on a horse

and fowl showed lesions of poliomyelitis.

Norway and Sweden were visited by an epidemic of about 1500 cases in 1905. The disease first appeared epidemic in New York and vicinity in 1907, when there were about 2500 cases. The disease was epidemic in Melbourne in 1908, and in St. Paul, Minn., in 1909. Massachusetts had 136 cases in 1908, and 923 in 1909.

The cause is an ultramicroscopic organism, so small that it may pass through the invisible pores of a porcelain filter. Infectious material thus filtered has been used to inoculate monkeys, producing in them the same pathological changes and clinical symptoms as have been observed in the human. After passing the virus thus through successive monkeys of the old world type, the new world monkeys and rabbits may be inoculated. Most of our knowledge along these lines, we owe to the careful experiments of Landsteiner and Paffer (*Zeitschrift f. Immun. W. exf. Ther.*, 1909, ii, 377,) Flexner, Strauss, Huntoon, Osgood and Lewis. It has been shown that the virus, in the human, is contained in the cerebrospinal fluid, the nasal and pharyngeal mucus, and in certain glands, especially the peribronchial and mesenteric lymphatic glands and the liver. It is possible that the organism may be widely distributed throughout the body. Many of the histological changes are apparently due to a toxin, though this has not been isolated. It is possible that the infection may find entrance through the lymphatic channels contained in the prolongations of the membranes around the olfactory nerves. At any rate, after cerebral inoculation of monkeys, the virus may be recovered from the nasal mucus. Thus we are reminded of the origin of the salutation *Gesundheit*, based upon the belief of the ancient pathologists that the brain is a large gland that suffers from

occlusion of its outlet and is relieved by sneezing.

Pathologically, the disease is characterized by an infiltration of lymphocytes, in the intercellular spaces in the meninges and between the cells in both the cord and brain. Later there is degeneration of the cells of the cord and brain, apparently of a toxic character. So that the paralysis is partly due to pressure of the infiltrate and deficient nutrition, and partly to actual destruction of the cells, probably by a toxin. The paralysis due to pressure and malnutrition is usually temporary, whereas that due to destruction of the cells is permanent. The period of incubation in the human and in the experiments upon monkeys, is about three weeks.

During incubation there may be some of the symptoms observed during the period of incubation of many of the infections, such as gastrointestinal disturbances, headache, malaise and lassitude. Often the onset is sudden, without the history of prodromal symptoms, the disease being announced by fever, vomiting, convulsions, possibly coma.

Fever is sometimes absent, but usually runs from 102° to 104°F, lasting for a day or two to possibly a week in severe cases. Usually there are pains in the back and in the muscles of the extremities, general hyperesthesia, and sometimes disturbances of sensation, especially numbness and tingling.

As the period of invasion closes there is the rapid development of paralysis, often to reach a maximum within a day, sometimes increasing for two or three days or a week. Most frequently one or two extremities are involved, though the paralysis may include all four extremities and even some of the muscles of the trunk, usually sparing the respiratory muscles.

The paralysis affects the legs three times as often as the arms, and the left leg twice as often as the right. Sometimes there is an irregular distribution

of the paralysis. In two-thirds of the cases it is confined to one member.

Not all the muscles of the affected part are equally implicated. Thus, in the lower extremities, there is a tendency for the paralysis to spare the flexors of the legs, the glutei, the quadriceps and the iliopsoas muscles. Usually there is paralysis of the tibialis anticus, and often of the peronei and the extensors of the toes.

In the upper extremities, there is a tendency to spare the forearm and hand muscles, with involvement of the supinator longus, the biceps, brachialis anticus and the deltoid. Sometimes there is paralysis of all the muscles supplied by the radial nerve, except the supinator longus. The serratus anticus may be affected, with the hinder portions of the deltoid, the infraspinatus and the rhomboids.

Of the five lumbar segments of the cord, usually the fourth and fifth are most affected. Of the eight cervical segments, principally the fourth and fifth are involved.

It would seem that no motor nerve is necessarily exempt.

Within a week or two the paralysis begins to diminish, improvement continuing for several weeks, after which any remaining paralysis is usually permanent. The paralyzed muscles atrophy, the affected limb becoming distinctly smaller and shorter than its healthy fellow. The paralysis usually affects the lower extremities, and there is marked reaction of degeneration. The most frequent deformities are talipes valgus and varus. Usually the cases that recover are able to walk with braces.

In diagnosis, too often the disease is not recognized until paralysis develops. The characteristic features are the acute onset, spontaneous improvement of some of the affected muscles and rapid wasting of those permanently affected, the absence of sensory symptoms and the presence of the reaction

of degeneration. In doubtful cases, the cerebrospinal fluid should be examined, which is of the greatest assistance in making an early diagnosis.

In routine work, animal experimentation is not practicable because the varieties of monkeys susceptible to inoculation from the human are expensive. Therefore the chief reliance in practice is placed upon the examination of the cerebrospinal fluid in conjunction with the clinical picture. There is the sudden onset, with fever, coma and generalized convulsions,¹ which are rarely repeated after the first few days; the paralysis usually widely distributed, flaccid in character, associated with rapid atrophy; reaction of degeneration, diminution or loss of the deep reflexes, with no permanent involvement of the intellect.

The prognosis as to life varies, apparently dependent upon the proportion of abortive or light cases that are included in the collection of cases from which the statistics are drawn. As to the paralysis, as stated, there is an improvement of the initial widespread paralysis. Any paralyzed muscles that do not react to the faradic current by the end of a year may safely be regarded as permanently paralyzed. But hope should not be abandoned within this period.

Prophylaxis calls for isolation, the destruction of excreta, especially the secretions from the nose and pharynx, and the screening of both the sick and healthy from flies. No civilized community should tolerate a breeding place for flies. The virus is very resistant, surviving in a weak carbolic acid solution, remaining virile after prolonged dessication, and has been recovered both from flies and their excreta. The Massachusetts State Board of Health, in their 1911 report, emphasizes the important role that may be

¹—The convulsions of the cerebral palsy of children is more localized, involving one side or limb or possibly only the face.

played by insect carriers, such as fleas, and hence the importance of controlling household pets. The disease may be conveyed by third persons. Possibly the greatest difficulty in prophylaxis is encountered through the conveyance of the virus by abortive cases and the so-called carriers. Thus, the virus has been recovered from the pharyngeal mucus as long as six months after an attack. But usually isolation for four weeks is sufficient.

The early treatment is that of fevers in general, rest in bed, light diet, sponging. An initial dose of calomel is usually advantageous. Hydrotherapy and salicylates, acetanilid, phenacetin or lactophenin if the heart is weak, are useful to allay pain and nervous symptoms. Absolute quiet is essential. The application of an ice bag along the spine and the use of counter-irritation have the endorsement of usage. Later, with the subsidence of the acute symptoms, massage and the faradic current, eight to ten minutes daily or every other day, should be continued for months. The patient must be kept well protected from cold, warmly dressed, and be encouraged to use the affected muscles. Later braces and surgery, especially myotomy, tenotomy, and nerve and tendon transplantation may be of value.

In the way of direct address to the cause, much was hoped from the administration of hexamethylenamin, urotropin, which is known to be secreted in the cerebrospinal fluid. And it does do some good. In experimental poliomyelitis of monkeys, this drug lengthens the period of incubation and sometimes actually prevents the development of the disease. Its use in therapy is well justified by both experimental and clinical observations. But too great reliance should not be placed upon this method of preventing the disease. Too often we see these people relying upon this method of prophylaxis with all the

implicit confidence of childhood.

Local applications to the nose, nasopharynx and throat, are apparently of value. For this purpose hydrogen peroxide and menthol are popular.

Serum therapy has apparently been successful in the experimental poliomyelitis of monkeys, when used within twenty-four hours after inoculation. In this connection, we must remember that in practice, cases usually do not come under the observation of the physician until some three weeks after inoculation. But who can tell what day may bring us news of a successful serum therapy for this dread disease. Till then our efforts must be directed chiefly towards the prevention of the malady.

At the present time, August 8, 1912, there have been reported since June 10th, 195 cases of infantile paralysis, of which number 104 cases are still under quarantine. During the epidemic thus far there have been 38 deaths.

The writer has under observation twenty-one cases of infantile paralysis and a number of suspects that may be cleared up by laboratory examination. The following is a brief synopsis of the cases:

1. Baby F., male, 3 years of age, paralysis of the lower extremities. Had been bitten by a fly about July 4th. First symptoms began July 13th.

2. M. G., male, 4 years of age. No paralysis. First taken sick July 24th, after eating watermelon. The chief symptoms were vomiting and tripping.

3. Baby R., female, 2 years of age. No paralysis. Began as diarrhoea August 1st.

4. E. C., female, aged 11 months. Paralysis of the arms and legs, most marked in the right leg. Taken sick July 24th.

5. Baby F., colored, male, aged 15 months. Slight paralysis of the lower extremities. Taken sick July 8th. Weak and peevish. Absence of the kneejerk.

6. Baby B., male, aged 18 months. No paralysis.

7. M. D., female, aged 3 years. Symptoms began July 21st, as fever, restlessness and vomiting. Kneejerk diminished on left side. (H. F., a sister, presented the same initial symptoms the same day, followed by paralysis all over the body, and death. This child was 5 years old, and died before the family came under the observation of the writer.)

8. L. O., male, 20 months old. Very slight paralysis of the right leg. Began July 26th with vomiting, diarrhoea and fever 104° F. Kneejerk present.

9. R. G., male, 4 years of age, showed fever July 31. No paralysis. Sweating and peevishness, with loss of the kneejerk.

10. Baby W., female, aged 2 years. Paralysis of the shoulder muscles and the flexors of the lower extremities. Began July 16th with peevishness and pain, referred to the stomach, ear and gums. Kneejerk absent.

11. M. C., female, aged 5 years. No paralysis. Began as soreness all over the body July 29th.

12. G. C., 2 years of age, brother of M. C. Paralysis of the left leg and thigh. Taken sick July 27th. Had been eating dirt.

13. F. McK., female, age 5 years. No paralysis. Fell off a tree and sprained neck July 17th. First symptoms began July 29th.

14. J. C., female, 20 years of age. No paralysis but great weakness. Had pains in the back of neck and back July 21st.

15. D. P., female, aged 2½ years. Very slight paralysis of the left leg and thigh.

16. B. P., aged 4½ years, brother of D. P. Paralysis of the muscles of the right shoulder and of the back of the trunk.

17. R. B., male, 3 years of age. Very slight left facial paralysis. History of fall, striking left side of fore-

head two or three days before paralysis began. Entire absence of kneejerk. Considerable stumbling and falling, which the mother declares has always been observed.

18. Baby S., female, 2½ years of age. Had paralysis of the head and neck, which has entirely disappeared. Began July 17th.

19. Baby A., female, aged 8 months. Paralysis of the right arm except the fingers, and also paralysis of the right leg and foot. Taken sick July 4th. Second house from Baby S. Mother reported having found a fly in the baby's mouth.

20. A. K., male, aged 9 years. Had some soreness in the legs. No paralysis.

21. B. K., aged 6 years, sister of A. K. Was unconscious about fifty hours. No paralysis.

Thus far in the epidemic, there have been reported 195 cases, of which number 106 are males and 84 females, the sex not being stated in 5 cases. In those seen by the writer, there have been 10 males and 11 females. These cases were seen by the writer as physician in the Department of Health of the City of Los Angeles.

Henry VIII of England died at the age of fifty-six of dropsy, complicated by intractable ulcers of the legs. Of imposing stature and vigorous constitution during the greater part of his life, he became fat and more or less helpless with advancing years. Largely on this account he seems to have been given to self-medication. In the British Museum there is a stout volume which contains, in the king's own handwriting, formulas for solutions, mixtures, decoctions, plasters and ointments designed for a variety of ailments, among them a number of prescriptions for the "English sweat" (military fever) and the "French disease" which had been imported into England from Naples during his reign.

TUBERCULOSIS—A DISEASE OF THE INDIVIDUAL.*

BY W. WARNER WATKINS, PHOENIX, ARIZ.

That the host should interest us more than the parasite, in considering a bacterial disease, seems evident, but we have not yet fully comprehended this fact. When the relation of bacteria to abnormal tissue changes was demonstrated, the medical world expected to see bacteriological research solve all the problems of disease, and laboratory energy was directed chiefly toward isolating, cultivating and describing pathogenic microorganisms.

The visible pathological changes resulting from the growth of bacteria in human tissues have been thoroughly classified, so much so that in many diseases the presence of bacteria as the primary cause can be safely inferred, even though the specific bacteria have never been isolated. On the other hand, the chemical and biological changes resulting from bacterial invasion make up a vast field which we are just beginning to enter, and although great discoveries in this branch of pathology have already been given to the world, it is generally thought that they are of little practical value in the treatment of disease. This is well illustrated by the fact that, although we thoroughly appreciate the vast importance of bacteria in the production of abnormal tissue changes, i. e., disease, yet a masterpiece on General Pathology has, out of a thousand pages, only one hundred and fifty devoted to those changes produced by bacterial invasion and growth in the tissue. However well we may know the complexities of the structure and growth, secretions, excretions and reactions of bacteria under varying condition—however well we may be acquainted with the bacteria themselves—unless we know, also, just what occurs when these bacteria invade protoplasmic tissues, we cannot treat diseases intelli-

gently. Those changes which occur in animal tissues after bacterial invasion are as infinitely more complex and varied than the bacterial activities as the histological structure of the human body is more complex and varied than that of the bacterial body. A knowledge of these essential chemical and biological changes in human tissues is vastly more important for the proper treatment of disease than is a knowledge of the bacteria themselves in any of their variations. Bacteria are important only because of the changes which they produce when in contact with living tissue.

When bacterial organisms are planted in culture media, changes occur (1) in the bacteria and their excretions, (2) in the media. The longer the germ grows on the medium, the more pronounced and complex do these complementary alterations become. This is a bacterio-biological law which must ever be reckoned with in considering those diseases caused by bacteria developing in human tissues. Immediately following the invasion of tissue by bacteria, changes begin to take place in the protoplasm of the cells, in the secretions of the cells and consequently in the medium surrounding the cells. These changes are of such a nature as tend to destroy the bacteria and protect the cells. If the bacteria are not immediately killed, they, themselves, undergo changes which tend to permit them to live and thrive under the newly created inimical conditions. These changes in the bacteria induce more pronounced changes in the cells and fluid media, and then greater reactions occur in the bacteria. These interactions continue indefinitely until either the bacteria or the cells succumb. Under such conditions, the variations in the cells are far greater

*Annual Essay, Arizona Medical Association, May 7, 1912.

than those in the bacteria, and wherever cells and fluids have undergone adaptation to bacterial influences, we find them altered to a vastly greater degree than are the bacteria. Another important fact which is generally overlooked in our zeal to pursue the bacteria rather than to study the host, is this; that, while we have learned that every bacterial species produces reactions and changes peculiar to itself, we have never attached sufficient importance to the fact that the same microorganism may invade several human tissues whose gross structure is the same, yet whose chemical and biological peculiarities vary with each individual. If it were possible to have tissue cells which have never undergone alteration from the normal and subject those cells to the action of a given germ, like the tubercle bacillus, the results would be the same in every individual. But where this, or any other bacterium, invades tissues in which the cells have already varied in countless directions, a protoplasmic condition will be encountered which is peculiar to the cells of that person and different from that of any other person; so that the results of adaptation to the same bacterial influence will be different, to a greater or less degree, in each individual infected.

In an essentially chronic disease, like tuberculosis—and tuberculosis in this paper refers only to pulmonary tuberculosis—we have, in the slow progression of the changes, a condition which makes the disease essentially different in each individual. The interactions between the bacilli and the cells, which increases in complexity in direct ratio to the length of infection—will differ in each individual according to the length of time of the infection. And, of more importance, at the time of infection, the biological and chemical conditions of the tissues and fluids will differ for each individual, the degree of this difference depending upon the

influences which have previously affected those cells and fluids, so that the reactions to tuberculous infection will not, and cannot, be the same in any two individuals. This is particularly true in tuberculosis, because the infection occurs gradually and progresses insidiously, consequently, the reactions will be gradual and the cellular peculiarities acquired by heredity, physical training, varying foods, individual habits, and previous diseases, give abundant opportunity to interfere with or augment the biological reactions.

Every man who has ever treated tuberculosis with the painstaking care demanded by the disease, has early learned the lesson that every tuberculous patient is a law unto himself, and must be treated as if he were the sole patient suffering from that disease. When we begin to treat tuberculosis conscientiously and scientifically, we find ourselves facing a remarkable paradox; that is, that, of all diseases, tuberculosis is the one for which most inflexible rules are needed, yet it is the disease least susceptible to treatment by rule, and empirical treatment of tuberculosis will always bring disaster. The very prevalence of tuberculosis, and the enormous literature available on the disease, have led us into errors away from which they could have guided us. We have accepted tuberculosis as a disease of simple and well known pathology, attacking selected portions of the lung and proceeding in an orderly manner to arrest or destruction, so that few doctors have hesitated to make graphic drawings of the abnormal lung changes after physical examinations of the chest. This attitude has led us to disregard, in large measure, the individual peculiarities of the disease, and to look upon tuberculosis as a communal disease, a plague of the masses afflicting a vast aggregation of sick people turned out of the same pathological

mould, and to be handled in the same unvarying manner. Hundreds of physicians have their entire scheme of treatment for tuberculosis printed and simply hand the printed instructions to a patient, telling him to read and obey the rules laid down therein and he will recover—unless the disease has progressed too far.

This paper does not pretend to teach anything new, nor to prove anything of therapeutic value, but simply wishes to insist upon an entirely different attitude on the part of the physician toward the individual tuberculous patient. We will never cure such individuals by any empirical treatment. If a man could have a thousand patients infected with tubercle bacilli from the same growing culture, within three months he would have the utmost diversity of reactions—biological and hematological especially. And if he should take those thousand patients and treat them exactly alike, whatever the treatment might be, he would commit a grievous error and one which would cost him a goodly percentage of the thousand lives—when all might be saved. Even though the infections should all occur, first, in the pulmonary apices—which would by no means be the case—and there be the same area of involvement in each person with no perceptible difference in the appearance of the tubercles, the essentially vital changes which will be in the cells and fluids remote from the point of invasion will be different for each individual. For the biological reactions which produce a cure or make death possible, **are not** in the tubercles, but in body cells and fluids outside of the tubercles. Such changes must be reckoned with in each patient and must further be reckoned with, in their variations from time to time in the same patient. Instead of a disease of comparatively simple and easily determined changes, we have, in tuberculosis, a disease of the most varied pathological

changes of any abnormal condition, a disease of puzzles, of sudden changes, where every insignificant variation in symptoms has an important meaning, a disease the great basis of whose treatment is to forestall further invasion, where every step needs to be checked and every advance must be inventoried before further advances are attempted. It is, in short, the disease of all diseases in which the diagnosis, prognosis and treatment are based on individual peculiarities, where every patient must be considered apart from all other patients, a law unto himself. When we apply rules to tuberculosis, they must be general physiological rules, and the moment we pass from physiology into pathology, lay our hand on the diseased area and attempt to influence it directly, then rules must be made for each patient regardless of every rule that may previously have been made for other patients.

These principles are necessary: (1) In making an accurate diagnosis; (2) In giving an intelligent prognosis; (3) In administering scientific treatment.

FIRST—If an accurate diagnosis is to be made, we must remember that patients vary utterly in their gross pathology and must be handled individually. Tuberculosis follows no rule in invading the lung; it may infect any portion—base, apex or root. The physician who, after examining the apex ever so carefully and failing to find abnormal signs there, declares the lung free from demonstrable tuberculosis is dangerously presumptive. It has recently been clearly proven* that the primary point of invasion in tuberculosis is frequently the root of the lung, the bacilli entering the peribronchial glands at this point (Figs. 447, 448, 455 and 459, Vol. II, Sabotta). The fact that these glands are the natural port of entry for tubercle bacilli seems to have been largely overlooked

*Article by Dr. Jordan, in London Practitioner for Jan., 1912.

until the lesions were demonstrated in radiographs by the author above referred to. Foreign particles entering the bronchi are promptly removed and carried to these glands by leucocytes and it is but natural to conclude that bacilli suffer the same fate, and the final infection of these glands will depend upon the number of bacilli inhaled and reaching the glands alive. The twenty or thirty lymph nodes at the hilus and surrounding the bronchi as they enter the lung, together with the smaller pulmonary nodes deeper in the lung tissue, receive the lymphatic vessels which drain the surface of the lung beneath the pleural covering and which accompany the bronchi in their ramifications. Infection of the nodes at the hilus, once established, extends along these lymphatic vessels, accompanying the bronchi into the deeper lung tissue or reaching the surface of the lung beneath the pleura. Dr. Jordan states that, of the cases of tuberculosis examined by him, forty per cent show involvement at the root only; forty per cent show concomitant involvement of root and apex, while only twenty per cent had primary apical involvement. This is an illustration of the fallacy which has been pursued by thousands of conscientious physicians of following empirical methods in diagnosis and failing to consider their patients as individuals, when searching for a possible pulmonary tuberculosis. Another important point regarding tuberculous invasion at the root of the lung is that it cannot be detected early by ordinary methods of examination, and is revealed only by radiographic shadows. This point has been dwelt on at length because it seems so important. The few examinations made by me seem to confirm the contentions of Dr. Jordan; that peribronchial tuberculosis is frequent; that it cannot be detected by percussion or auscultation, but is revealed by a radiograph. Out of forty radiographs recently taken,

thirty of them showed massive involvement at the root of the lung which had not been elicited in repeated careful physical examinations, and never could be so elicited. A few of these radiographs are offered as illustrative of this important point. In print No. 1, there is a normal lung, apices clear, borders of the large vessels nearly hid behind spine and sternum, heart pearshaped and extending well to the left. I have no radiographs of pure apical tuberculosis, there being none in the series taken by me. Prints Nos. 2 and 3 show the least root involvement of any taken, with well marked consolidations in the apices. The vertical heart or Tropfenherz of the Germans is well shown in most of these radiographs, this being quite characteristic in tuberculosis. Prints Nos. 4, 5, 6 and 7 show combined apical and peribronchial tuberculosis, the main masses being at the hilus. Cases of this kind, in all probability, developed the infection at the root first, spreading from this focus into the apices and other portions of the lung. Prints Nos. 8, 9, 10 and 11 show nearly pure peribronchial tuberculosis, apices being nearly clear, but showing large masses around the hilus, made up of enlarged glands, infiltrated bronchial tissue and scars—the lines of extension being along the bronchi into the deeper lung tissue. Print 12 shows a disseminated tuberculosis, with massive involvement at the root, radiating into every part of the left lung. If graphic drawings are made after physical examinations of chests, and then, for the sake of comparison, drawings made of the same patients from radiographic shadows of solidifications and infiltrations, the differences will be very striking.

If we are called upon to determine definitely whether a patient has tuberculosis or not, we cannot depend upon any classical description of the location of the lesion, nor follow any set method of finding the area. If we find

no involvement at the apex, we must remember that the point of primary invasion may be, and probably usually is, at the root of the lung. If the trouble is not at the root or apex, it may be at the base or deep within one of the lobes. Furthermore, failure to find physical signs of any kind does not rule out, absolutely, a fairly advanced tuberculosis, for it has been demonstrated that a patient may accumulate such a mass at the root of the lung, suffering so much destruction and contraction of scar, at that point, as to produce perceptible flattening beneath the clavicle, without any demonstrable variation from the normal breath sounds and without audible rales. So that a patient presenting himself for a diagnosis as to tuberculosis, must be examined on the basis of his own symptoms and without regard to symptoms presented by thousands of patients before him, because every individual has abundant opportunity to develop symptoms and changes peculiar to himself alone. Every known method of testing for tuberculosis should be exhausted before a definite statement is made, and no physical examination of the chest for tuberculosis is complete unless it includes a radiograph of the root and surrounding area.

SECOND—In making an intelligent prognosis, every patient is a law unto himself. When we consider upon what the prognosis in tuberculosis depends, we can easily appreciate the hazard involved in making a statement as to the outcome of the disease—a hazard which experience has taught us all to respect. Nearly every physician bases his prognosis, not upon the cellular and biological resistance of the host, but upon the known virulence of the bacillus. Finding a slight apical involvement, little fever, well nourished tissues, he prognoses recovery, basing the opinion, involuntarily, upon the known susceptibility of the germ to destruction under certain conditions,

without stopping to ascertain whether the conditions of cells and blood which are inimical to the bacilli, exist or not. He will be dismayed to see continued progression and death within a year. Or, finding a patient with numerous rales throughout the lung, persistent fever and profuse expectoration, he prognoses inevitable death, perceiving that the bacillus is active at the time and simply presuming that the biological condition of the patient is not such as will destroy them. He will be vastly astonished when the patient consults a Christian Scientist and recovers after the biological adaptation, which will check the bacillary activity, has occurred. Just as an accurate diagnosis cannot be made by a superficial examination, neither can an intelligent prognosis be based on a single examination, however thorough it may be, nor can a prognosis be based on what has occurred in any number of patients previously observed with a similar degree of infection or destruction. One of the best authorities on tuberculosis in the country recently took me to task for hesitating to give a fatal prognosis in an apparently desperate case. This doctor sat by the patient, observed his dyspnae, his frequent cough and purulent sputum, looked over his temperature chart, and without any further observation, gave him six months to live, saying, "I have seen too many just like that to be fooled by them." In the vast majority of cases the distinguished visitor would be right, but it was not an intelligent prognosis, nevertheless, for it was not based on any knowledge of the patient's powers of resistance to the infection. Every intelligent prognosis must be an individual one, considering the patient entirely apart from every other sufferer and only after weeks of observation and an exhaustive examination into every power of resistance possessed by the sufferer. To act otherwise is but to justify the brilliant

definition of an internist as "a doctor who sits outside and guesses what is on the inside."

It is well to note, in passing, that so far as a limited observation has gone, the prognosis will depend to a considerable extent, on the location of the mass of the involvement. Pure apical consolidations are favorable for arrest, while peribronchial glandular tuberculosis is to be regarded with dread, for these cases will tend to sudden changes, high fever, chills and toxemia, all the more to be dreaded, because they are not accompanied by explanatory physical signs. To illustrate this point, the graphic chart of the case illustrated by radiograph No. 11 is presented. Prognosis, in the outset, for this patient was based on physical examination (which revealed very slight detectable change), pulse, temperature and general appearance. He was permitted considerable freedom until the radiograph was taken, when he was promptly sent to bed, where the radiographic signs have been justified by an almost continual hemoptysis during two weeks, and by recurrent chills with high fever at irregular intervals, following which his temperature returns to normal.

THIRD—If diagnosis and prognosis can be made only by considering patients individually, this rule is infinitely more important in the treatment of the disease. **Empiricism** in tuberculosis must never go beyond physiological principles. Rest being the physiological law in inflammations, this principle is the basis of every rule to be laid down for general guidance in treating tuberculosis. Patients are kept in bed, or limited in exercise, so that the lung tissue may remain inactive to a great extent. Fresh air surrounds the patient continually, so that he may obtain a necessary food—oxygen—with a minimum expenditure of effort. Abundance of nutrition is supplied—especially proteids—for the sake

of furnishing repair materials with a minimum expenditure of effort on the metabolic mechanism. So that the great triad of essentials in the treatment of tuberculosis—Rest, Fresh Air and Good Food—is really only carrying the physiological principle of rest into the general body metabolism. The moment we step over the line and begin to combat the disease actively, that moment must we forsake all beaten paths and pick our way with each individual patient through an unblazed forest of facts, only a few of which are applicable to each case. We must first inform ourselves regarding the exact nature of the pathological process; then we must inform ourselves regarding the natural processes which are at work to combat the disease. Our duty in treatment is to aid these natural processes without damaging the patient in any way. Inasmuch as the tissue, cellular and blood changes which constitute the processes of repair are different for each individual patient, we need to inform ourselves regarding the exact nature and extent of these changes and conduct our treatment accordingly. In tuberculosis, where the biological reactions vary from time to time, and where they are complicated by mixed infections, the signs make up an ever shifting panorama which needs to be continually watched, if we are to do our patients justice. In studying tuberculosis as a plague, we have learned that nearly every one becomes infected with the disease, the vast majority recovering spontaneously. The differences in the conditions which lead to tissue regeneration in one man and to tissue destruction in another man embrace the secrets essential to the scientific treatment and cure of tuberculosis. When we eliminate the conditions that have led to extension of the inflammation and replace them with the conditions which will lead to regeneration, we shall have cured the patient. There are not, and

can never be, any set rules for accomplishing this. The process varies with each patient and is a long, tedious and changing fight in any given individual.

In beginning treatment for tuberculosis, a definite diagnosis must be made of the location of the diseased area, the extent of the involvement, the character and severity of the infection, the number and appearance of the organisms, and the presence of mixed infections; the general blood condition should be determined; the specific blood condition should be determined as nearly as possible. The general physical condition must be known, along with the severity of the toxemia and the rapidity of the metabolic changes. Prognosis can only be made after weeks of observation; after determining every power of resistance of the patient, general or specific, and after estimating the rapidity of progress or retrogression.

Nowhere in the study of tuberculosis do we find more striking illustrations of the need for handling each patient individually then in the use of specific remedies applicable to the disease. A few illustrations are offered and it must be understood that they are simply explanatory of a general theme and are not, in any case, offered as proof of the efficacy of any special form of treatment.

Every user of tuberculin urges us to select patients for tuberculin treatment on the basis of their individual symptoms, and this paper can only insist that these symptoms be investigated to the minutest detail, not only before tuberculin therapy is decided upon, but throughout the entire treatment. If, after a thorough diagnosis is made, it can be determined that the local process is quiescent, that the fighting cells are vigorous, that the opsonic index is low, that the reaction stimuli will be prompt, tuberculin is indicated. However, the temperature pulse and physical findings are indica-

tions for tuberculin ONLY when they correctly interpret the biological conditions of the blood; they may fail to do this correctly, and, consequently, are not sufficient. For an intelligent administration of tuberculin we must, in some way, be able to determine, after each administration of a dose, what its biological effect on the blood cell and tissue immunity has been. Expert men may be able to infer these effects from the general signs, but it will require more expertness to do this than it will to establish those effects by one or more of the various laboratory tests for immunity conditions, although it may take more time to do the latter. Tuberculin will frequently be held at a minimum dose, if its effects are checked by lymphocyte counts, or immunity estimations of some kind.

If examination of the patient determines that the hemoglobin content of the red cells is low, or those cells reduced in number, effort should be made to remedy this condition. Proper oxygenation of tissue cells is necessary to their vitality and no specific treatment can succeed which attempts to stimulate blood or tissue cells when they are not receiving their due quota of oxygen. Secondary anemia can frequently be remedied by hypodermatic injections of iron or arsenic, or both, with consequent improvement in all symptoms. One illustration of the effect of such treatment, Chart 2. Here specific treatment availed nothing until it was accompanied by treatment for the anemia, when all symptoms began promptly to improve.

If it should be found that a toxemia is present, due to invasion by other organisms, and it is desired to destroy these through the agency of vaccines, here, again, something should be known about the vigor of the cells and their ability to react to stimuli. Pneumococic and streptococic mixed infections usually disappear under vaccine treat-

ment, but the cases must be carefully chosen for such therapy. In using vaccines, it must be remembered that the simple injection of a vaccine made from the proper organism, even when the proper dose is given, does not insure beneficial results through the destruction of the invading bacteria. It is not the germ we have to reckon with, but the condition of the blood cells and fluids of the host. Research work must, some day, develop methods of previously determining what the effects of vaccines will be, when injected.

Where we have cases with active tuberculosis, numerous bacilli, overpowered cells, abundant tuberculotoxin, our utmost resources will be taxed and the vast majority of such patients die. But we must never cease to search the individual case, because many of them have hidden powers of resistance and reaction which we can nurse and lend aid to, to the benefit of the patient. A remedy which offers relief in many such cases is Dr. Carl Spengler's Immune Blood. This preparation claims to destroy, gradually, the tubercle bacilli, and, at the same time, to neutralize, to some extent, the toxins liberated. So far as my own experience has gone, it seems to do this, the fever diminishing in many severe cases, and the general symptoms improving, while the bacilli gradually disappear from the sputum. Inasmuch as the lysis of the bacteria will be pronounced, while the neutralization of toxin is limited, there will be sudden and unexpected, often alarming, variations in the temperature, these variations, however, becoming less and less frequent and severe, until they no longer occur. A remedy which can be given in any stage, regardless of the height of the fever or the severity of the infection, which destroys the bacilli and neutralizes the toxins, if the dose is properly regulated and too great lysis avoided, is a remedy of great value. In pre-

senting a few illustrations showing the effects of "I. K." charts are shown with daily ranges of temperature and others with the range from week to week, for each patient. Since tuberculosis is so chronic a disease and any remedy will affect the symptoms only gradually, a weekly chart including the highest daily averages gives a better idea of the effect of treatment than a small section of daily temperatures.

Patient, Usborne—Advanced tuberculosis in both lungs, with cavitation. Before I. K. was given there was no improvement with several months' rest in bed. Chart three shows range of daily temperature in beginning; chart four shows weekly range of temperature; chart five shows daily range at present, after six months' treatment with I. K. Patient is now up, has gained ten pounds in weight and all perceptible physical signs of activity have disappeared.

Patient, Horspool—Advanced tuberculosis, with completely solidified right lung. Chart six shows range of daily temperature in beginning; chart seven shows weekly range of temperature and pulse; chart eight shows much steadier range after six months' treatment. Gain in weight 28 pounds, with gradual absorption of solidification so that air now enters all portions of the lung, with a few moist rales still to be heard.

Patient, Cox—Four years' standing, disseminated tuberculosis in both lungs with cavity. Chart nine shows daily range of temperature and pulse in beginning; weekly ten chart showing temperature and pulse during four months' treatment with I. K.; chart eleven showing daily pulse and temperature at close of treatment. At this time there were still signs of activity over about the same area, with gain in weight of 16 pounds.

Patient, Brigham—Two year case of advanced tuberculosis, involving both upper lobes; cavities. Long period of

rest in bed had not affected the progress materially. Chart twelve shows range of fever and pulse at beginning of treatment; chart thirteen shows weekly range during six months' treatment; chart fourteen shows temperature and pulse at close of treatment; gain in weight was 12 pounds, with no perceptible signs of activity.

Patient, Rohde—Advanced tuberculosis, disseminated throughout both lungs, cavities and consolidations. Chart fifteen shows range of temperature with hemorrhage in middle of month; chart sixteen shows weekly range during four months' treatment; chart seventeen shows range at close of treatment; gain in weight, 20 pounds, with signs of activity in apices only.

In conclusion, let us remember that when a physician is brought face to face with bacterial disease, it is his function to observe carefully the ef-

forts on the part of the body to rid itself of the parasites, and, when he can be reasonably sure of his ground, to lend aid to these processes. But if he cannot be reasonably certain, he should not interfere. In treating tuberculosis, ignorance of the processes which summon the natural defences of the body to eliminate or neutralize the disease should bar us from attempting to interfere in the healing efforts. Where we can first inform ourselves of the conditions existing in each individual patient and can augment the tendencies to repair or healing, we are justified in lending such aid. If we have not so informed ourselves, the only scientific and safe course is to create simple and natural hygienic conditions around and within the patient and leave the reparative processes to Nature's efforts alone.

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SOME NEGLECTED PHASES OF THE MANIFESTATIONS OF PULMONARY TUBERCULOSIS—THE NERVOUS SYSTEM.

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While a great deal of attention has been given the tuberculous problem along many important lines, the disturbances of the nervous system and the psychic mechanism have been but little commented upon. Perhaps this is due to the lack of neurologic and psychiatric experience which is a very general defect amongst the majority of us. Also, the use of such general terms, neurasthenia and psychasthenia gives one a sense of security in covering the question of the meaning of many manifestations. In the light of modern research we should ask the question if these manifestations of nerve disorder do not merit closer attention and study?

No attempt will be made to enter

deeply into the problem under discussion, as space is too limited for such purpose.

Disturbances of the nervous system have been found in my experience very frequently. It is true in many instances that the symptoms are of such a general nature as to almost defy classification. Hence one is forced to call certain manifestations neurasthenia or psychasthenia. It is pretty generally stated that the nervous symptoms depend in a large measure upon the character, habits and general make-up of the individual. Naturally, one will expect to find more disturbance in the hereditarily poorly equipped, the naturally "nervous" temperament, and those whose nervous systems have been

weakened by alcohol, fatigue, worry and various excesses. This predisposing element is given undue importance by some observers, who attempt to explain everything on the basis of natural predisposition. In contra distinction to this idea of far more importance is the work of Jessen, Cestan, Pitres and Vaillard, Schmidt, Poncet and others on the peripheral nervous system; and the work of Kohler, Engle, Hanel and others on the Psychic disturbances in pulmonary tuberculosis. These observers have shown that there results definite toxic neuritis and brain disturbance from the tubercle toxin and associated enzymes. The results of the investigations of these writers seems to have been but little recognized, particularly in general practice.

The older description of the phthisical individual, the fair skinned, fair haired, high strung individual, giving the picture of unusual mental and nervous activity is to be mentioned here. Also the so-called scrofulous individual with thick skin, muddy complexion and sluggish nervous system. From our modern studies we know that the tuberculous predisposition is in reality only the latent manifestation of the infection itself. That the old idea concerning predisposing make-up is wrong, and that the infection takes place in most instances before the age of 15 years must be admitted.

Concerning these cases of masked tuberculosis one observer (Holles) in a recent monograph from considerable research work, comes to the conclusion that there results in these cases from a tuberculous toxemia many symptoms, the import of which are wrongly attributed to different causes. Under the caption of tuberculous intoxication, (masked or latent tuberculosis) as a result of his investigations he groups the following symptoms: Headache, dizziness, insomnia; troubled sleep with bad dreams, vasomotor and temperature disturbances, sweats, stomach dis-

turbances, irritability, nervousness, changes in the temperament, fatigability, Basedows syndrome, tuberculous rheumatism; other symptoms not so closely related to the nervous system which he attributes to tuberculous intoxication, are: menstrual disturbances, anaemia, chronic constipation, asthma and difficulty in breathing.

In the discussion of these cases, Holles particularly points out the importance of recognizing that the origin or basis of these symptoms is often latent or "larvierten" tuberculosis, which he proved by the tuberculin test and by their subsidence upon I. K. treatment. While these symptoms have a heterogenous causation from an etiological standpoint their relation to tuberculous intoxication has not been sufficiently recognized, particularly by the general profession. These symptoms are found most particularly in association with anaemia, so-called neurasthenia, hysterical manifestations, various neuroses or rheumatism-like pains. From a clinical standpoint the recognition of the association of such symptoms with latent tuberculosis, with but little or no physical signs to be demonstrated is of distinct diagnostic importance. The tuberculin test in some of its modified forms helps in such manifestations to clear up a very doubtful etiology. Also from the standpoint of treatment, the early recognition of the symptoms as of tuberculous origin, gives the individual the best opportunity for an early cure by the tuberculin treatment.

Not all of the psychic manifestations or nervous symptoms found in association with pulmonary tuberculosis are to be understood as being "characteristic." In many instances disturbances arise which are more properly attributable to the general cachexia, the long confinement, the lack of proper mental exercise, the break in habit,—exercise which in my opinion is very fundamental, also the results upon the mind

or worry, oftentimes poverty, etc., must be considered. Köhler claims two psychic aberrations, however, to be specific weakness of the intellect and weakness of the emotional tone. I will not enter here into a discussion of these symptoms upon which considerable diverse material has been gathered but shall turn to a symptom group, which is an early manifestation and admittedly toxic. I refer to the "Basedow symptom group," rapidity of the pulse, vasomotor disturbances, the condition of mind (fear) (*Angst zustände*) with other general symptoms. Ritter of Edmundstal states that he observes this complex in about 30% of all cases. He is inclined to attribute many of these early symptoms, particularly those related to the nervous and psychic systems to a past infections Thyreoiditis. He has frequently observed enlargement of the post sternal portion of the thyroid gland.

In our experience enlargement of the thyroid gland with the symptoms mentioned are of common occurrence in pulmonary tuberculosis. The point here to be emphasized is that the association of this symptom complex with tuberculosis should be kept in mind from the standpoint of differential diagnosis.

Psychical disturbances in early pulmonary tuberculosis are not unusual. There may occur a sudden complete change in disposition, inexplicable depression, irritability, increased suggestibility, pronounced apathy, weakness with seemingly good nutrition, loss of will power, disturbances of the esthetic sense, bizarre emotional reactions, inadequate and unreasonable in nature, increased egoism and self-centering of the personality. These signs may be present before definite physical changes are to be demonstrated.

Emminghaus, Berillon, Morel, Neumann, Jessen, Brehmer, Griesinger, Arndt, Roth, Engle and others have

observed these changes in early pulmonary tuberculosis.

An interesting point in regard to this matter is brought out by the researches of Head in regard to certain mental changes that accompany visceral disease. (Brain Part III, 1901.) We are conscious that our mental well being is dependent on the right activity of our internal organs and daily experience shows that grave mental disturbances may arise in connection with visceral disease. Such mental changes may be produced in many different ways, viz., disturbed activity of the heart, changes in organs which produces some substance necessary for normal metabolic activity, the thyroid, etc., retention of toxic agents in the blood due to lessened excretion, lowering of the resistance of the nervous system so that poisons such as alcohol, etc., can produce mental changes both in quality and intensity different from those produced under conditions of different resistance, and lastly disease of the viscera may so lower the patient's resistance that some inherent mental tendency may become manifest as active mental disease. Head further states that the intrusion of actual nerve stimuli (the existence of which have been demonstrated by the "zones" over the skin and tenderness of the superficial tissues) from visceral disease are accompanied by certain changes in the consciousness and are associated with reflected pain. In spite of the frequency of these symptoms Head states that their existence is generally unrecognized by the physician, although the patient may recognize them, and often associates them with the first appearance of the disease. These statements I consider of considerable importance in the study of pulmonary tuberculosis.

In a very interesting study of cases of pulmonary tuberculosis, Head finds that the mental disturbances are associated with and directly brought about by the visceral reflexes from the lungs

and associated organs. Among the mental disturbances studied by him are: hallucinations, vision, hearing, smell, moods, depression, exaltation, suspicion, changes in memory and attention, and conditions underlying these.

Space will not allow of a discussion of all of these phenomena, but the following points concerning the depressed mood in pulmonary tuberculosis are of great interest. Head states that the greater the number of the segmental areas affected, the more certain will mental changes make their appearance. Again it would appear that the presence of pain and tenderness over some of these segmental areas is more likely to be accompanied by the sense of ill being than where pain and tenderness affects other areas. Thus pain and tenderness over any of the abdominal areas is peculiarly liable to be associated with this sense of ill being, whilst pain and tenderness over the upper thoracic areas must be relatively more severe and of longer duration before it becomes associated with depression. A disease that causes reflected pain over the upper thoracic areas such as uncomplicated aortic stenosis, is less likely, therefore, to be associated with depression than mitral stenosis with regurgitation, which is, under certain conditions, liable to produce pain and tenderness over the 7th, 8th and 9th thoracic areas.

For the same reason acute disease of the upper lobe of the lung is less likely to be accompanied by depression than affections of the lower lobe. For affections of the lower lobe are also liable to be accompanied by pain and tenderness over the 7th, 8th and 9th dorsal areas. But these areas are peculiarly associated with gastric disturbance and for this reason painful affections of the stomach are most frequently of all accompanied by this form of depression. **Many a case of phthisis will remain entirely free from depression until a sudden fresh affec-**

tion of one lower lobe, or the onset of some gastro-intestinal complication causes a sudden outburst of pain and tenderness over some of the lower dorsal areas.

The recognition of the relationship between the segmental disturbances from visceral disease, with the mental manifestations which occur in the course of the disease picture is of great importance, in that it gives us a definite tangible theory for the explanation of these phenomena. Pain of the reflected type calls up the whole field of visceral activity into consciousness and it is probable that those who are subjects of these mental changes are thereby rendered more susceptible to normal alterations in visceral feeling tone which would otherwise have passed unobserved. This would seem to be one cause of the exalted sense of well being that sometimes appears in cases of visceral disease and probably helps to furnish examples of the "spes phthisica." In general this hopefulness as a real mental state except as a very late manifestation is a myth. It arises from the fact that the patient is practically ignorant of his condition, and cannot properly interpret his symptoms. If such a patient enters a hospital he quickly learns the significance of his symptoms, and he soon arrives at a just sense of his condition.

Head states that the reflected visceral pain brings in its train all those images and dispositions which exist normally at the fringe of or entirely outside the field of consciousness. All those sensations that are associated with visceral activity, which do not exist in consciousness under normal conditions come to the surface. The patient's character appears to be altered for the content of his consciousness is changed. He will become moody, at one time unduly exalted, at another depressed without cause. Reason is displaced, and he is the victim of each passing wave of feeling tone

and he will have lost control over the expression of his emotions and of his temper. That barrier which the normal mind puts between conscious life and that of the viscera, the integrity of which depends on a high potential of vitality in the nervous system has been broken down. The same dominating impulses bring into train a series of anti-social mental states, he is driven to shun his fellows, and for the time being acts under the influence of the same nature which drives an animal when wounded, into the brush to die, the autonomic nervous system.

Thus the effect produced upon his actions by the mental state induced by his disease serves directly in a civilized community to make his lot harder than it would otherwise be.

Many of these states prior to Head's studies were classified under the head of hysterical manifestations, and it is a very desirable thing to relegate them to their proper position. From a diagnostic standpoint these observations deserve careful study.

The recognition of the fact that many symptoms on the part of the nervous system such as chronic headache, nervousness, fatigability, dizziness, vasomotor disturbances, neuralgia, rapid pulse, etc., may be due to latent or early tuberculosis is an important measure from the standpoint of diagnosis. Furthermore it must be admitted that changes in the "psyche" of an individual occur not uncommonly in early tuberculosis. Many of these patients are regarded as "nervous breakdown," "hysteria," etc., and from a study of case histories, many an opportunity for early diagnosis and treatment is missed on the basis of an improper recognition of the varied causation of such symptoms. The theories of causation of these nervous disturbances rest upon a toxemia of the brain, a disturbance through the sympathetic system of the thyroid gland (Basedow) and upon Head's conception

of referred visceral pain. The psychopathic state or predisposition naturally is the basis for the production of the symptom groups in many cases. On the other hand the latent tuberculosis may from childhood up engender such a picture, *per se*.

From the prognostic standpoint, pulmonary cases suffering from depression generally do badly. In a therapeutic way the use of psychotherapy by suggestion and persuasion, with the rest cure, conservative hydrotherapy, and careful attention to the diet, with tuberculin treatment offer the best aids. But one must insist upon more careful examination of the mental and neurologic status of these patients.

The following case history illustrates the enormous factor disturbance the nervous system plays in the symptomatology and therapeutics of pulmonary tuberculosis. The patient was a young woman of twenty years, whose first symptoms pointing to pulmonary trouble began at the age of eighteen, with slight hemoptysis. Prior to that time for a period of several years she had shown marked disturbances in the nervous system, at times simulating epilepsy. The detailed history is as follows:

FAMILY HISTORY. Father died at age of 59 from some cardiac affection. Mother died at age of 36 from some uterine trouble, nature unknown. No tuberculosis. No history of epilepsy. Father was a farmer by occupation, and of a very quarrelsome, at times unreasonable disposition. He was subject to periods of emotional excitement, in which he treated his family with great cruelty; when not in these moods was kind and gentle. He never injured anyone, had no epileptic attacks, but was egotistical, inclined to worry, had ideas bordering on persecution concerning his neighbors. Was divorced twice by his consort on the grounds of cruelty. There were never any evidences of mental deterioration,

he did not drink and was a good worker. Three children, one son and two daughters, inherit the same quick tempered emotional disposition, but are all good workers, bright and intelligent. The patient's mother died when the child was $1\frac{1}{2}$ years of age.

PERSONAL HISTORY. Patient had measles at the age of six, with severe bronchitis and ear trouble. Frequent attacks of bronchitis during early childhood. Menstruation began at age of sixteen and always regular. Her early life was a hard one, owing to domestic difficulties. She practically lived alone with her father, who was erratic. Had little schooling, but was bright and intelligent. In disposition was cheerful, but easily fatigued; capable of considerable work; exceedingly fond of dancing; had strong likes and dislikes, and slightly inclined to secretiveness, but loved pleasurable exercise. When excited would burst into tears and tremble all over. At the age of seventeen she went to work as a clerk in a store, and began to suffer from attacks of fainting. She would fall in a heap, and lie unconscious for about ten minutes with twitching of the extremities, but did not bite her tongue. After coming out of the spell her mind would be clear, though she would be quite weak. The spells came on at irregular intervals. Music would get her excited and emotional. Sometimes she would go for a month without an attack, but again would have several in a week. They continued up to the time of examination for tuberculosis. Within a year after the development of these symptoms she began to cough and spat blood several times. It was two years after these first symptoms that she presented herself for examination.

In appearance she was a somewhat anaemic, poorly developed young woman, hands and facial muscles tremulous, manner uncertain, voice quavering, and inclined to be tearful under

cross questioning. Her expression was anxious, she spoke clearly and rapidly, but turned constantly to her companion for confirmation of her replies. Her pulse was rapid (110), skin moist, tongue coated, bowels sluggish, digestion poor, often nauseated, marked globus, no stigmata of degeneration, much belching after eating, had been a poor sleeper and still suffered from these "attacks."

Examination of chest showed slight infiltration of right apex, which was apparently quiescent, with marked infiltration, and moist rales in the upper left lobe. The cough was not marked, expectoration scanty, but numerous tubercle bacilli. There was some tenderness over the region of the right ovary, over the 3rd, 4th and 5th dorsal spines, and in the zones over the chest corresponding to these segments, particularly on the left side. Later the tenderness spread over the lower dorsal zones, into the epigastric area. There was no typical hysterical zones over the body. Her manner was in no way silly and there were no delusions or other signs of mental deterioration. Hemoglobin 88.5% Tallquist, stomach contents showed slight hyperacidity.

She slept poorly, talked in her sleep and several times left her bed and wandered about the grounds. When accosted, her answers were confused and uncertain. Several times while walking about the grounds, she would suddenly fall in a faint, become semi-unconscious, with rapid breathing, and flushed face, but there was no cry, biting of the tongue, nor any distinct twitching of the limbs. There was a slight daily rise of temperature, but never over 99.5° F. These attacks would last only five or ten minutes, when she would get up somewhat weak but mentally clear.

After considerable study of her case, I resolved to try the effects of suggestive therapeutics, with persuasion. It was clear that she did not belong to

the true hysterical type, there was no evidence to diagnose dementia precox which from the emotional condition would naturally suggest itself, and one came finally to the consideration of a psychopathic disturbance based on poor heredity, in the nature of a psychoneurosis. In this connection the influence upon a neurotic makeup of the referred pain as outlined by Head certainly has a bearing. This patient had for several years suffered from dull pain between the shoulders, with gastric disturbance, depression and emotional disturbances.

I felt that it was necessary to probe into the history of the patient's entire emotional experiences and the result of this process is stated below. Now these attacks began at the age of seventeen years and came on with abruptness. It is impossible here to give a complete abstract of the long conversations which lead up to the psychic trauma, which was the origin of the girl's psychic condition. The temperament of the father has been described, and the incident hereby related shows the strain under which this girl developed her psycho-neurosis. After long questioning the following was revealed. She stated that one evening her father was very angry and emotional concerning some trivial thing which had occurred about the house, which she was indirectly responsible for, and she retired nervous and unstrung. During the night she was rudely awakened by a light flashed in her eyes, and she found her father standing by her bedside with a revolver in one hand pointed at her head, and holding a lighted match in the other. He said, "When this match goes out I will shoot you." She lay speechless with horror. The match went out, and the hammer clicked, but no explosion followed; immediately her father laughed and said, "Now you will be more careful and not annoy me, for the next time it will be loaded." Now the girl

was afraid to tell this story to anyone as she feared the consequence to her father and his revenge upon her. From that time on she was literally haunted by this "fear" which when the picture presented itself to her, she would be overcome by a faint feeling, and fall to the ground. Often in her sleep she would rehearse the whole drama and awake with a scream, or get up and wander about confusedly. It undermined her whole self control and tinged her mental concepts completely.

It was under great emotional stress that I finally succeeded in getting this story and only by gentle persuasion and support. The process which was carried out in this case was obvious. One literally had to drag out the last remnant of these "fear" ideas by talking them over quietly and calmly, and gradually she came to regard the whole thing as merely an unpleasant episode. The mode of procedure was that of a daily seance, usually in the afternoon, with the patient lying relaxed in her bed, and suggestions were given her appropriate to the main "leads" of the conversation. I never resorted to stereotyped hypnotism, but did succeed many times in persuading her to close her eyes, and relax her body while I talked to her, and when she was quiet, stepped out of the room. Often she would immediately fall asleep. Of course, this took an hour or so daily patient work, but it succeeded in completely rehabilitating her nervous control. She began to sleep better, eat better, had no more fainting spells, rapidly gained weight, and under a dietetic hygienic regime became a different person.

In six months' time she went to live with an uncle, who had been instructed as to the origin of her symptom, and at the present writing is perfectly well, having had no return of her nervous or pulmonary trouble. While in this case the pulmonary disease played only a secondary factor, it must be admit-

ted that careful attention to the details of the nervous system was an essential factor in the cure, and probably prevented a complete disruption of a somewhat neurotic makeup.

It is not enough to ding-dong the platitudes of fresh air, good food, rest and all the disiderata of the "cure," but one should carefully estimate the patient's capability and adaptability to get the most out of them. It has been said by a great authority in tuberculosis, that the disease does not bring about the fatal issue, but the character of the individual does. Therefore one should study the individual characteristics of his patients, inquire into his family history for nervous and mental peculiarities, his early life, his attitude toward discipline, his emotional tendencies; in short, one should make a special effort to bring out the innate peculiarities of each individual's makeup, his reaction type, for it is as much upon these things, as upon the material treatment, that the outcome will depend. If one can succeed in inspiring confidence, the use of suggestive therapeutics is easy. But no amount of suggestion will hope to do any good unless one takes a special mental history of these cases. One may state that the lack of knowledge or these conditions of proper handling of pulmonary cases (particularly) the lack of the proper conception of the mental state of our patients, their worries, doubts and their origin, is what drives many a patient into the mental healing cults. There are those among us who scoff at the mental manifestations and symptoms in pulmonary tuberculosis, who seem to find some "moral" issue which must be defended, but this is a misconception. There is no "moral" issue in psychic manifestations in pulmonary tuberculosis. Anti-social acts performed by tuberculous invalids are neither moral or immoral, they are "unmoral," and in their proper sphere possess impor-

tance from a psychiatric standpoint only.

While only a few points have been touched upon in this paper, in conclusion I would emphasize that the careful examination of all patients suspected of pulmonary disease from a neurological and mental standpoint will prove of valuable diagnostic, prognostic and therapeutic interest and is a field of research which is undeservedly neglected. I have not considered in detail the symptoms of involvement of the peripheral nervous system, but reserve that subject for a future paper.

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One of the worst afflictions we can bring upon a sick man is a professional nurse. One of the greatest God sends a helpless invalid can have is a trained nurse.—The Medical Era.

THE WASSERMANN REACTION IN CHILDREN.*

BY WILLIAM A. EDWARDS, M.D., LOS ANGELES, CAL.

The relation of the Wassermann test to children is a very valuable one. As is well known to those of us who were in active practice before this and other tests for syphilis were given us, the clinical signs, symptoms and the history given by the mother of still births or miscarriages, were practically the factors on which we based a diagnosis of syphilis in children, either congenital or acquired. Very early the so-called therapeutic test was shown to be of little value, but the three that have stood the ultimate test of time in children as well as adults are of great value. The following are in their order of value: 1st. The microscopic diagnosis, based on the presence of the exciting agent and, of course, when positive, is an absolute, positive indication of the presence of syphilis. 2nd. The sero diagnosis which is the well known Wassermann reaction. 3rd. Inoculation experiments. Here, as in all other fields of medicine, the clinical diagnosis will continue to be the most important of all.

Before considering the matter allotted to me in the program I wish to say a word in regard to the test for increase of globulin-content of the cerebrospinal fluid. The test either as suggested by Noguchi or, as I prefer, by Nonne-Apelt, is delicate and easily carried out. In both fresh cerebro-spinal fluid is necessary and the test is readily made by the general practitioner without the aid of a laboratory. I find, however, that the general practitioner is attaching too much importance to the value of this test. It is true that the reaction is often seen in syphilitics and indeed in parasyphilitics where there is no disease of the central nervous system. Of course it will be more pronounced in those cases of cerebro-

spinal syphilis, tabes dorsalis or syphilitic dementia. Unfortunately, however, it is just as constantly found in certain nonsyphilitic conditions and these would have to be eliminated before the test was positive.

In a word the test is positive in all inflammatory conditions of the meninges, which is a condition that is frequently caused by the following organisms, organisms that are frequently met in childhood—diplococcus intracellularis, pneumococcus, tubercle bacillus, influenza bacillus, and the organism or virus of poliomyelitis. In addition in children it is seen during acute fevers, as typhoid, pneumonia, septicemia and sometimes in acute anemias.

It will be readily seen, then, that this reaction is of value only as confirmatory evidence of syphilis in children in whom the clinical symptoms would warrant such a diagnosis. Its ease of performance and its comparatively slight expense recommend its use for the general practitioner as an aid in his clinical diagnosis.

The Wasserman has greatly illuminated the two aphorisms long accepted as absolute in syphilis—the Profeta and the Colles law. This hereditary immunity or Profeta's immunity as is well known indicates that children born of syphilitic parents are immune against inoculation for a variable period and the Colles immunity indicates that the mothers of syphilitic children are immune, that is, a woman who has a child the product of a syphilitic spermatozoa is immune against inoculation. When the Wasserman test is applied to these statements the picture changes; for example, in 1910 Knopfmacher and Lehdorffer subjected 32 apparently healthy mothers of syphilitic children to the Wassermann reac-

*Read at the meeting of the Southern California Medical Society, Pasadena, May, 1912.

tion and the results were positive in 18 of these women. Boas and Thomsen also found that the children of syphilitic mothers who did not respond to the test at birth did so later in their childhood.

The consensus of opinion now seems to be that all these mothers and babies are syphilitic, but that the disease is latent.

Baish's studies are perhaps of all the most illuminating. He examined 140 women who had miscarriages or syphilitic children. Twenty-four mothers gave a negative reaction and their dead fetuses showed no spirochetes. One hundred and two mothers gave a positive reaction and it was possible to demonstrate the *Treponema pallidum* in the fetus or the child. Now the important matter in regard to the above time-scarred so-called law is that of the 102 mothers who responded to the test 27 had clinical evidences of syphilis and 72 were free from such diagnostic aids. Baish adds that these women may have been spirochete carriers, had latent syphilis or that the complement fixing bodies may have been formed in the fetus and filtered through the placenta to the maternal circulation, but he was able to find *Treponema pallidum* in the placenta and in the maternal decidua hence it would seem that the mothers were of necessity infected. The reaction in the mothers does not diminish after the birth of the child and again the blood of the mother and the child at times would give different reactions. In twelve of the mothers who showed negative reactions the fetus and the placenta showed spirochetes thus showing that the organism may be present without forming the complement-fixing bodies. It would seem that in order to have the complement-fixing body spirochetes must be present in the blood of the body. These observations have been confirmed a number of times. Swift in 14 congenital syphilitics found 12 posi-

tive reactions; the mothers of the two negative children had been subjected to prolonged mercurial treatment. Of ten women who gave birth to syphilitic babies or had miscarriages, nine gave a positive reaction. Lucas examined 20 mothers with syphilitic children, 19 gave a positive reaction and in ten women in whom the syphilitic symptoms in the children were not well marked he got a positive reaction in 7 instances. It is to be noted with interest that only 6 of these 30 mothers gave a history of syphilis or presented any evidence of the disease when the examination was made.

Now that all of us who are engaged in infant feeding are depending more and more on the wet nurse for the difficult feeding cases the importance of the foregoing paragraph becomes very great, particularly the concluding sentence.

It would appear then safe to conclude that in the light of modern knowledge the so-called Colles immunity is nothing more or less than latent syphilis and the Profeta's immunity of children is nothing more than latent syphilis also.

It should be our rule then to treat for syphilis all mothers and children who give positive reactions, no matter what the clinical symptoms may be. Nor should we allow any wet nurse who reacts to the test to nurse other than known syphilitic babies.

In older children the test has, in my experience, proved of the greatest value, particularly as a therapeutic guide. In the syphilitic bone disease of childhood the test has rarely proved negative in my practice and it is perhaps in this class of cases where it has proven of its greatest value to me.

What is a failure? It is only a spur to a man who receives it right, and it makes the spirit within him stir to go in once more and fight.

NITROUS-OXIDE-OXYGEN ANESTHESIA.*

BY CARL G. PARSONS, M.D., ANESTHETIST, DENVER, COLORADO.

President Witherby and Members:

In order to better understand the physiological action of Nitrous-Oxide-Oxygen anesthesia, it is necessary to mention the solvent action of alcohol anesthetics upon certain cells of the system. The latter act as follows: "The narcotizing substance enters into a loose physico-chemical combination with the vitally important lipoids of the cell, perhaps with the lecithin, and in so doing changes their normal relationship to the other cell constituents through which an inhibition of the entire cell chemism results. It also becomes evident that the narcosis immediately disappears as soon as the loose, reversible combination, dependent on the solution tension, breaks up." This is a part of the Meyer-Overton theory, which is founded upon a firm physiological basis. Thus we have, at times, serious post-anesthetic complications, due to the destructive action of ether and chloroform upon certain cells of the body. Nitrous-Oxide gas combined with oxygen produces anesthesia in an entirely different way. Its action is mechanical. The gas mixture is inhaled, simply dissolved in the blood, then taken to the brain and produces anesthesia by preventing the use of oxygen by the brain cells. Activity of the brain cells is only possible in the presence of oxygen. The highly dischargeable substance of the brain cells is prevented from being used up for the want of free oxygen. The gas bathes, films, or coats the nerve cells, preventing oxidation; and also intercepts various centripetal sensory irritations on their way to the cellular gray matter. Thus may be seen the difference between the action of alcoholic derived and gas anesthetics. One

acts in a physico-chemical (solvent) manner; the other is mechanical. When the administration of gas-oxygen is discontinued the patient wakes up almost at once. With ether and chloroform considerable time may elapse before the patient comes to.

Patients can be put under safely only to a certain limit with gas-oxygen, because secondary asphyxial symptoms arise from a too concentrated nitrous-oxide gas. Thus there is always a certain degree of tone in the entire body and this tone is accountable for the rigidity of the abdomen, especially if the parietal peritoneum is handled roughly. From the surgeon's point of view, this is the main objection to gas-oxygen anesthesia. This condition can be overcome in most cases by the previous administration of drugs, or by adding a very small amount of ether vapor to the gas during inhalation. As one gives more and more gas-oxygen anesthetics he is able to get better and better relaxation without the addition of any ether. It required a good many years of study and practice to give a good gas-oxygen anesthetic.

Death under nitrous-oxide-oxygen anesthesia is generally produced by asphyxiation, which is secondary to a too concentrated nitrous-oxide. The peculiar purplish, slate color of the patient seen at times is simply the color of the mixture of blood and gas. It is not cyanosis. Cyanosis is an entirely different color, takes longer to appear and presents characteristic symptoms. Alarming asphyxial symptoms may occur, but as a rule are due to faulty administration, as with other anesthetics.

The reason gas-oxygen has come into use of late is due to the perfection of apparatus. The flow of gas-oxygen

*An abstract from an address delivered before the Los Angeles County Medical Society, May 3rd, 1912.

must be even, properly warmed, and be under a certain pressure. It must be administered with due regard to the law of anesthetic accommodation, i. e., gradual administration, with continuous, equal, drug distribution. It must be given in a non-asphyxial form, yet there must be enough gas administered to produce the desired narcosis. To strike the happy medium is the difficult point in administration and requires expertness.

Patients are made ready for operation in about three or four minutes and after a reasonable length of administration (one, two or three hours) they awaken in about thirty seconds.

Its contra-indications are few; the two main ones being marked cardiac disease, either myocardial or valvular with considerable dilatation; and atheroma.

Now the question arises, why is nitrous-oxide-oxygen coming into use?

It is not because the anesthetist is anxious to administer it, for it is a most difficult anesthetic to give and is not particularly remunerative after all expenses are paid, and it is not that the surgeon is keen to work on those cases which present a rigid abdominal wall. The reasons are plain and are in the interest of the patient, viz: There are no deleterious changes whatever produced in the human economy by the gas, i. e., on the heart, lungs, kidneys, blood, or viscera; it eliminates shock; it is pleasant to inhale; it is the safest anesthetic known (in the hands of an expert); it possesses immunity preserving qualities, which are beyond dispute; it is mechanical in action; it is rapidly eliminated; there is no nausea and vomiting in the vast majority of cases, provided the patient is properly prepared for operation.

228 Metropolitan Bldg.

PRACTICE IN MEXICO.

BY JOHN V. GOFF, M.D., LOS ANGELES.

When first beginning the practice in Mexico I began in a mining camp. These camps, like mining camps in other parts of the world, are composed of good and bad people.

Among the first calls that I had after arriving in camp was from a farmer and stock raiser called a "Ranchero." This man lived about 25 miles out in the mountains and I was told that the only way to get there was to ride a mule which the man had brought along for that purpose.

This was about 8 p.m.; very dark; it was raining and the wind was blowing hard, with sharp flashes of lightning and peals of thunder. Being a stranger and unacquainted with the people of the country I at first declined to go. The man was much excited and informed me that his wife was in a

dying condition, and there being no other doctor in camp, he begged me and argued that I would surely not allow his wife, the mother of three little children, to die because I would not go and help her. He got down upon his knees, kissed my hands and offered me his farm and everything he had on earth if I would but just go and save his wife.

The people at the house where I was stopping told me that they were unacquainted with the man and that I had better go and make inquiries about who he was and if I decided to go to make a bargain as to the price that I would charge for the trip and all necessities before I started, as it would certainly be very unsatisfactory to arrange it afterwards.

I went out in company with my host

to see a merchant of reliable reputation, who assured me that my client was a very worthy and honest man; to "follow him and fear no danger," but advised me to also arrange for the fee and the cost of any medicines or other necessities before starting.

Finally all was arranged and the start was made at 9:30 p.m., an hour and a half after the man had asked me to go. All this time was taken up by the man and his friends arranging to get the cheapest fee possible. The storm in the meantime grew worse, the streets of the camp were running with water.

After riding over the worst kind of a mountain trail for about two hours the storm began to abate somewhat and through the sounds of rushing waters which it seemed was all around us, my guide suddenly stopped his horse and called out, "Who comes there?"

The answer immediately came, "Good people."

My companion told me to quickly dismount and get behind a large rock that was close by. I lost no time in doing so. In the meantime challenges came and went between my companion and the other parties.

When all seemed satisfactory they all advanced, shook hands, a large bottle of native liquor was passed around. I was cordially invited to come out and join them in a social drink to the health of the United States and the new doctor.

I was very wet and cold, extremely uncomfortable, and in a condition to accept almost anything that would act as a stimulant. There was no temptation; it was dark and the tequila went down my shirt bosom. They thought I took an awful big drink for a doctor. I made the customary haw and cleared my throat just like they did. The bottle was passed several times and when we parted my shirt bosom had the odor and appearance of a first-class Mexican

distillery, but it was a case of being sociable.

These people proved to be mounted Rurales (country police) and coming upon us at that time of night and they being in possession of several bottles of native whiskey, I was told that we were in danger, as they were on the trail of thieves and it is sometimes not their custom to challenge any one on the road in that part of the country late at night, but to shoot at once so as not to run any chance of getting shot themselves or of losing track of their human game.

We were given permission by them to proceed on our way, but warned about a river that we would be obliged to cross further on and advised us to ride fast in the hopes of getting there before it was swollen so much on account of the rain that we would not be able to ford it without swimming the animals. They warned me that on account of some rapids below that to attempt to swim might prove very dangerous as many lives had been lost there.

We urged our animals to go as fast as the darkness and the roads would permit and when we reached the river my companion told me that it was all right; that we had reached it in time, and that there was no danger as it was still fordable. He said, your mule being very large and strong he will wade right across and touch bottom all the way; just give him the bridle and do not try to guide him and he will wade right across and not swim an inch. I was assured by my companion that he had crossed many and many times when it was twice as high as it was at this time.

He plunged right into the whirling torrent and I went in immediately afterward. Both animals went under head and all, and it was with the greatest difficulty that I retained my seat in the saddle. I was afterwards told that the water at that time and place was fifty

feet deep and running like a mill race. My companion's mule struck a current or something and rolled completely over and was lost to my view. I did as I had been instructed, allowed the mule a free bridle rein, and it seemed to me, in the darkness, that we were being carried straight down the river and I thought I could hear the rapids below, when suddenly my mule struck earth and scrambled out on the other bank of the river.

At this time I heard shouting from my companion, who upon learning that I was safe told me that he had had a very narrow escape from drowning; his mule had been washed from under him and by good fortune he had succeeded in grasping its tail. It turned around and went back to the shore from which they had started. We could with great difficulty make ourselves understood on account of the distance and the roaring of the water.

At this time we were greatly favored, the storm completely abating, the wind stopped blowing and the moon came out from behind the clouds. My companion told me that he was afraid to risk it again and would go up the river to another place that he knew of and would try and cross and join me on that side in about an hour or more. He succeeded in crossing above, but told me that it was after two unsuccessful efforts and that he would not try it again if all the world was offered to him for doing so.

We arrived at the house of the patient at 9 a.m., cold, tired and hungry. I found the woman suffering with a retained placenta. The midwife had informed the patient, the relatives and the neighbors that the woman would die; she had never known a person to get well in that condition.

There was weeping, wailing and great excitement. The husband gave the anesthetic and the placenta was removed in a few minutes.

After eating a hearty breakfast con-

sisting of milk, sweet bread and fried eggs, the woman having no bad symptoms whatever, I was preparing to begin my return journey. My clothes were very wet and uncomfortable.

The husband informed me that I would be expected to remain there at the ranch at least three days to see how his wife progressed, and that I was not to expect any extra pay as the price of the trip had all been arranged for in the town before leaving on the night before. I explained that was only for the trip and not for time which I considered unnecessary to be spent at the ranch with the patient. I was told if I would not stay that I would have to go home on foot and alone, as they had turned the horses out to eat grass upon our arrival and now they could not be found before a couple of days, but if I would consent to remain until the morrow that he would borrow animals from a neighbor and take me home. To do that would take all day; there being no other alternative I was obliged to remain.

We returned the next day with the same animals that we went over with, it being only a ruse to keep me longer without extra pay.

When we arrived at the camp and he was paying over the money for the trip he told me that he was not a rich man and he would appreciate it very much if I would give him a reduction in the bill.

All arrangements having been made for the cost of the trip before we started out, my mistake was made in not specifying that all over time unnecessarily spent at the patient's house should be paid for at so much per day or hour.

A short time after this I was aroused from sleep about 12 o'clock in the night and informed that there had been a dance, some drinking and a serious quarrel had resulted between three of the male attendants. I was told that one of the men had been dancing with

a girl, another becoming jealous, the other reached down and with his sharp knife hamstringed him; he being carried out of the house, the other immediately took up the dance with the girl, whereupon a companion of the wounded man slashed open the abdomen of the other, letting out his intestines until they dragged upon the brick and dirt floor. This man then, it was told, grabbed a rock, hurled it at the other, knocking him insensible to the floor, then dragged himself up to the other and without beating his life out with the same rock that he had knocked him down with.

I was taken first to see the dead man, then to see the man who was hamstrung. I found him suffering shock due to great loss of blood. The tying of some artery branches, suturing the wound and an ordinary antiseptic dressing disposed of him. Then we started to find the man who was wounded in the abdomen, whose trail we were able to follow by the blood by the dim light of an old lantern. We found him in charge of two policemen who, being informed about the dangerous character of the wound, sent word to the Jefe Politico and received permission to have him put into an improvised hospital consisting of one room, the ceiling about 5 feet high and the walls made of bamboo, unplastered, which admitted plenty of air from the outside. These policemen guarded him night and day. A fire was started on the outside of the room under a large olla (earthenware jar); my dressings, sponges, instruments and everything needed was placed in this olla; when boiling had continued about 15 minutes it was taken off of the fire and allowed to cool by placing the olla in a tub of cold water. When cool enough, a druggist gave the anesthetic and I began to explore the extent of the injuries.

The incision in the abdomen was found to be about seven inches long, dividing the navel in the center, the

knife entering the abdominal cavity and puncturing the small intestines in three different places. The intestines and abdominal cavity were flushed out with the boiled water and cleansed as much as possible of dirt and powdered brick dust from their contact with the floor. The intestines were sutured and the abdominal wound closed up and dressings applied, all having to be done by the light of the lantern and tallow candles.

The patient made a good recovery and at the end of four weeks began to walk around under the surveillance of the police and was about to be sent to the county seat to stand trial for murder, when the man whom he had hamstrung (by this time entirely recovered) made a dash at him and with one slash cut open his abdomen again, just below the former wound. However, in the time that had elapsed I had provided myself with better instruments and hospital conveniences, and being done in the day time I was enabled to do better work than with the other wound, and consequently had greater hopes of his recovery now than I had before, especially as no brick dust and actual filth had entered the wound as had been done before. The druggist and I went at the job again. On exploring we found that one of the intestines was punctured and at another place was entirely severed, and we consumed considerable time in removing blood clots, fecal matter, etc. The ends of the intestine were cleansed of fecal matter, trimmed the edges, painted with tinc. iodine and a Murphy button sewed in place, the punctured intestine sutured and the abdomen closed in the usual way. During the first five days there was frequent vomiting, but the temperature never rose higher than 101° F. From this on to the 11th day there were no pain, fever nor abnormal symptoms whatever. On the 11th day, after some abdominal pain and cramp, there was a natural movement of the

bowels, in which was found the button. He was free from pain of any kind and said he was well.

I called to see him early on the morning of the 12th and found him sitting up in bed and his breath smelling strongly of liquor.

I warned him and charged the woman nurse about the great importance of continued rest in bed, continued diet and a complete observation of all the rules that I had given before.

I assured him that if he would follow my advice that I was certain that he would come out of it a well man.

I was called away into the country a half hour afterwards and was unable to return until the evening of the 14th, having been unavoidably delayed one day longer than I expected. On my return I was told that they had buried my patient about 1 o'clock that day. The druggist told the rest; he said the day that I left was the patient's birthday and his friends came to see him in large numbers. They drank freely and secretly gave it to him. They told him he was well and nothing could kill him. He got out of bed, ate chile, cucumbers, meat, cabbage, beans and vegetables of all kinds and drank everything that his friends gave him. He kept this up all day and part of the night. He collapsed and died in a short time after a fierce struggle with the police, who assured me that he was making an attempt to escape.

The superintendent of the mines run his hand musingly through his hair and was heard to remark: "And thus was science and the law cheated; science was cheated because she failed to record another cure; the law was cheated because it did not have the opportunity to punish a murderer."

3420 University Ave.

Returns from the census of 1910 in the Southern States show some interesting facts relative to the racial proportions of population in that district. In the nine "cotton states," during the decade from 1890 to 1900 the increase of colored population in the cities was 23.2%, and that of the whites 27.6%; in the rural districts the negroes increased 17.5% and the whites 18%. During the decade from 1900 to 1910, the colored increase in the cities was 30.5% and that of the whites 46.6%; in the rural districts the negroes increased only 8%, but the whites 17.3%. The great gain of white increase in the cities is probably largely due to economic immigration; the great decline of the negro increase in the rural districts represents partly dissemination through other states, partly an actual abatement of natural increase. Whatever the cause, the figures seem to indicate, as might be expected, that the negro is not wholly able to compete with white races for survival, especially under the strenuous conditions of modern environments. —Boston Medical and Surgical Journal.

In the village of Koshilovo (Grodno government), Russia, there are over fifty peasants who have more than the usual number of fingers.

According to particulars published in the *Novoe Vremya*, they are all descendants of a peasant who married in the first half of the last century and who had extra fingers on one of his hands.

In the present generation this abnormality is reproduced to the extent of two, three, four or even five additional fingers. Some cases simply show a thumb duplicated from the first joint.

As a result of intermarriage the deformity is spreading to neighboring villages. It dispenses the young men from military service, however sound they may be constitutionally.

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EDITORIAL

THE ARMY CANTEN.

Col. L. Mervin Maus, Chief Surgeon, Eastern Division of the U. S. Army, has an article in the Chicago Medical Recorder, June, 1912, in which he pleads against the restoration of the canteen in the army.

Dr. Maus has been in the service thirty-eight years and being a surgeon speaks with authority which few men have. His plea against the bill now pending in Congress which seeks to restore the canteen in the army merits unusual consideration.

In the sporadic discussion of the subject since the canteen in the army was abolished in 1891, its supporters have contended that it in fact diminishes intemperance and immorality among enlisted men, and secures for them social diversion which is impossible otherwise and which they ought to be permitted to have. They have claimed that the opponents have been either ignorant of the facts involved or else temperance advocates of greater zeal than judgment.

For purposes of comparison Dr. Maus contrasts the period 1889 to 1898, during which the canteen was allowed, with that of 1901 to 1910, during which it has been abolished, and he says that in the second period general sickness has decreased, having been 12.46 per 1000 men before and 12.08 per 1000 men since 1901. The alcoholic rate during the canteen period was 36 per 1000 and 26 per 1000 since. The number of desertions have been less since the canteen was abolished. In his opinion there has not been an increase in the number of saloons and brothels about the posts.

In the period since 1901 there has been an increase of non-efficiency in the army, and an increase—in the records—of diseases of vice. Both of these conditions, however, admit of explanations which show that they were not results of the abolition of the canteen.

Before 1901 the army consisted of 30,000 men and since of 80,000. Before that date the army was not in the trop-

ies—since that time it has been in Cuba, Porto Rico and the Philippine Islands, and thousands of cases appear in the records of malaria, amoebic dysentery, spine, tropic anaemia and digestive troubles which have no relation whatever to the canteen, but which are due entirely to the stations where the men were. Again, prior to the Spanish war in 1908 no investigations were made and no records kept concerning diseases of vice in the army.

Dr. Maus says that the sale of whiskey was revoked in the army in 1881 because of drunkenness, and of beer in 1901 on account of intemperance, and temperance in the army has vastly improved since 1901.

A surgeon has rather better opportunities than any other officer has for knowing the physical and moral conditions of the common soldiers, and when as a result of thirty-eight years of observation in the army, and of careful consideration of statistics, Dr. Maus asserts that only harm and no good can result, in the main, by selling beer in the canteens, the burden of proof lies with those who oppose his contention.

E. W.

DECOMPRESSION AS A THERAPEUTIC MEASURE.

E. C. Henry (Medical Council) points out the indications for a decompression operation under four heads: Trauma, Inflammations, Tumors, and certain Systemic diseases. In every special branch of medicine a good knowledge of the anatomy and physiology is essential to success, and our results in dealing with the brain, the most delicate organ of the body, will be the measure of our preparation. The brain, he says, is enclosed in a complete water bag, the secretion being due to the activity of the choroid plexus in the lateral and third and fourth ventricles. The cerebrospinal fluid is formed mostly by the segments of the

choroid plexus in the lateral ventricles, and passes through the foramen of Monroe to the third ventricle, thence by way of the Iter to the fourth ventricle, then by way of the foramen of Mojeudie and the spaces of Key & Retzius into the cisterna magna, which lies between the medulla and occipital bone.

The most frequent place for a block is along the Iter, due to a proliferating ependymitis; or an erosion of the ependyma followed by a glial formation, which effectually closes the communication between the third and fourth ventricles, the result being an internal hydrocephalus. As a remedy for this latter condition, the operation of Stiles, that of tying both common carotids, in two sittings, is the one he recommends as giving the best results.

The author further points out that sudden death in spinal puncture is due to the sudden withdrawal of too much fluid from the spinal canal, emptying the cisterna magna, which floats the medulla, cerebellum and cord, and protects them from bony pressure. If the fluid is suddenly withdrawn or entirely drained, the latter organs are crowded from above into the foramen magnum, and as the medulla contains the heart and respiratory centres, the cause of death is quite easily understood. It is particularly dangerous to do spinal puncture in brain tumor. Even the withdrawal of as small amount as 2 cc. has produced vomiting and collapse.

Suction should, therefore, never be used in drawing off spinal fluid; 40 to 60 cc. is a large quantity, usually 20 cc. is quite sufficient.

The membranes of the brain can be compared to the general peritoneum in cases of infections, the difference being the skull cannot yield to the constantly increasing cranial pressure, and hence the products of inflammation are almost at once driven into the brain circulation, while in general peritoneal inflammations the belly walls extend,

and the fight rages indefinitely in the free peritoneal cavity. Cautions to be observed in basal fractures is care of the ear and nasal sinuses, when fractures open into them. Every practicing physician should avoid (1) probing a wound of the head to find a hole or fracture, and (2) not to wash a lot of dirt into a wound, as damage is usually done with the first dressing. In handling every-day head injuries, do not allow the patient to lie for days with a diagnosis of concussion, which only means he bumped his head. When the brain is traumatized sufficiently to produce unconsciousness for any length of time, hemorrhage is the cause, either massive or minute, the latter scattered throughout the cortex, and the former in the shape of large clots, extra or subdural, coming from a ruptured middle meningeal artery, or from some of the numerous veins passing from the pia to the sinuses. Death is due to compression. Headache and unconsciousness are two signs of cortical disturbance, while alterations in the pupil, respiration, pulse and temperature point to basal ganglia irritation. If one cannot convince himself of a hemorrhage do a spinal puncture, the spinal fluid will be tinged with blood evenly mixed and clear. Having decided a hemorrhage is present, the exact location should be found. The subject of cerebral location is long and the question of what to do in case it is impossible to locate the hemorrhage comes up. Those dying from hemorrhage linger from 24 to 36 hours, while those dying from clots live a week or ten days. The thing of vital importance is to take away the pressure.

In operating to relieve pressure, two routes are available; (1) the subtemporal fossa as shown by Cushing, and should be used in all cases when the hemorrhage is above the tentorium cerebelli; (2) if the bleeding is in the posterior fossa, the occipital bone may be removed and drainage established.

All large clots should be removed to prevent epilepsy and mental disturbances in the future. The time to cure traumatic epilepsy and insanity is at the time of injury and not five or ten years afterwards. Small minute hemorrhages in the brain offer a poor prognosis, as a gradual change in the mentality of the patient develops in after years which may be hard to differentiate from general paralysis. These small hemorrhages have caused spots of glial tissue formation, or multiple cysts, the latter are often followed by an attack of apoplexy where the hemorrhage blocks the circulation in a number of convolutions. The most pedantic asepsis and antisepsis is necessary, as once infection of the brain and cord the case is hopeless.

In treating inflammation of the brain and cord lumbar puncture is advised with injections of Flexner's serum, so that the fluid gets to the seat of the disease, which is in the lateral ventricles and around the cord; at the same time drawing off a little more of the spinal fluid than serum introduced, the idea is to keep down the pressure, as most patients die of increased cranial pressure.

Tubercular meningitis patients die a pressure death and life could be prolonged by a decompression operation, while tuberculin and other remedies are being used.

In doing decompression operations for tumors, two objects are kept in mind, namely, to relieve headache and to restore eyesight, the main point is to remove plenty of bone, as too small an opening would not allow sufficient room for the bulging brain, and the edges of the bony opening would cut the brain like a knife. A caution to be observed in advising operations in tumor cases, is that when the pressure is relieved, increased vascularity of the tumor takes place, and hence increased rapidity of growth of the tumor.

In Brights disease where there is

severe headache and vomiting due to increased cranial pressure, spinal puncture can relieve the symptoms by withdrawing some of the spinal fluid, thus relieving the tension. Some case histories are recited to illustrate the several conditions mentioned in the paper.

The article teems with an enthusiasm and a spiciness that should attract the attention and a careful analysis of its contents by all physicians doing a general practice as they are the ones who mostly see these brain cases in the beginning, and upon whom rests the responsibility of saving the patient's life, by rendering first aid or advising operative treatment.

MEDICAL EDUCATION IN EUROPE.

To the student of medical economics, Bulletin No. 6 recently issued by the Carnegie Foundation, for the advancement of teaching, is of very great interest. This volume containing three hundred and forty-six pages is devoted to a consideration of Medical Education in Europe, the investigations upon which the report is based were conducted by Mr. Abraham Flexner, whose report upon American Medical Colleges two years ago was one of the great factors leading to the elevation of educational standards so noticeable in American medical schools since that time. The introduction by Prof. Pritchett is most interesting and we quote freely from it as follows: "The primary object of this study is the benefit of Medical Education in America," and he brings out very clearly as his argument proceeds that "professional education is of vital interest not only to those in the profession but to the average citizen." "Every person whether he be rich or poor is concerned that the profession of medicine shall be placed upon the best possible plane, that the men who enter it shall be chosen under good conditions and

that the unfit and the unworthy shall be excluded from it." Therefore "the future improvement of the profession in such countries as the United States depends to a large extent upon the awakening of the mass of citizens to the importance of their own attitude toward this great profession." "Society is compelled to insist that those who enter it shall qualify themselves for its quasi public responsibilities and opportunities. * * * The obligation to enact statutes fixing reasonable conditions upon which the practice of medicine may be undertaken rests not only upon the necessity for preserving a high level in the profession but also upon the fact that only by effective legislation can the general public be adequately protected from exploitation by an army of ill-trained doctors, quacks and charlatans."

The previous report brought out a deplorable condition of affairs so far as a majority of the medical colleges in this country were concerned and this volume seems to emphasize those findings. Prof. Pritchett states this conclusion most forcibly in the following paragraph—"The most startling fact that stands out is this: faults of one sort or another may indeed be found with the medical schools of England, Scotland, France, Germany and Austria, but scandals in medical education exist in America alone. In no foreign country is a medical school to be found whose students do not learn anatomy in the dissecting room and disease by the study of sick people. It has remained for the United States to confer annually the degree of Doctor of Medicine upon, and to admit to practice, hundreds who have learned anatomy from quiz compends and whose acquaintance with disease is derived, not from the study of the sick, but from the study of text books. These scandalous conditions are, it is true, less wide-spread today than they were a decade ago, yet they are still to be

found in almost all sections of the country. The state of Massachusetts tolerates in the city of Boston, the state of New York tolerates in the city of New York, the state of Illinois tolerates in the city of Chicago, the state of Missouri tolerates in the city of St. Louis, the state of California tolerates in the city of San Francisco, so called medical schools that pretend to train doctors, despite the fact that they are almost wholly without clinical facilities. In no European country is it possible to find an educational farce of this description * * *. If the lowest terms upon which a medical school can exist abroad were applied to America, three fourths of our existing schools would be closed at once."

In commenting upon the prevalence of Quackery, he states: "That Quackery is not the result of a high standard of professional education is proved by the fact that it is found in all countries whose laws permit unlicensed practice whatever the level at which professional education begins." The only remedy lies in legislation. Speaking of the United States, he says, "It remains now for the various states of the Union to enact such laws as will in the first place make it impossible for the medical charlatan to trade in the uncertain zone of the laws in nearby states and will make it impossible as well for him to deceive the public by a medical degree which does not guarantee genuine training * * *. For such legislation, those who are seeking to advance medical education and to render more useful the medical profession, must rely upon the intelligent layman.

Another feature of the report upon which much stress is laid and which appeals to us in America most forcibly is the statement that there are no medical sects in Europe. Legalized medical practice in Europe is of one type only. Every qualified physician must comply with the law—having

qualified, he may call himself what he pleases. As a matter of fact, he calls himself, "Doctor." * * * The lesson is plain—Sectarianism in the United States is a device that admits to practice those unable to comply with the sounder standards. Whenever all practitioners are alike compelled to comply with one standard, almost no one wants to brand himself a sectarian. Our duty in this matter is to set up and maintain a single standard in respect to preliminary education, laboratory and clinical facilities, professional education and examination; and this in the public interest solely. That done, time may be trusted to settle the fate of the medical sects. A careful reading of Mr. Flexner's report serves to call attention to two phases of medical education which are basic in the European Universities but which are sadly wanting in America. One is the development of trained clinical professors whose chief interest is in teaching rather than in the practice of medicine. The other is the imperfect utilization

America of hospitals for teaching purposes. The proper method to follow in regard to these questions is best exemplified in Germany. There, "the teacher of medicine" is a teacher in precisely the same sense in which the chemist or mathematician is a teacher; then his workshop, the hospital, is only another sort of a laboratory. The professor of medicine or of surgery is indeed a physician, but from the standpoint of educational ideals and activities, this is of secondary importance. He is first of all a university professor; that title indicates his dominant and consuming interest."

In this country, a professorship has usually been considered simply a stepping-stone toward larger professional recognition in private practice; in Germany a man's clinical and teaching success is the controlling factor in larger educational opportunity. The scientist and teacher may be first as-

sistant in one clinic, be called to a professorship in a small university and thence to a similar chair in one of the great universities of the empire. He does little in private practice and that only in consultation work. His great aim in life is to be known as a teacher and discoverer. Virchow, Koch, Nothnagel, Von Noorden, Politzer, Von Eiselberg, and many others who have exercised such a tremendous influence upon medical science, all have been men of this type, all have been content with moderate financial remuneration and have worked for love of the science and the honor of being a state official "Herr Professor" outside as well as inside the University. To those who have been in touch with medical teaching in America, it has been very evident that sooner or later, the professor in charge of the clinical branches will have to be placed on a full time pay basis, precisely as has been the case with the laboratory branches, if the material available is to be handled to the best advantage. Many schools advertise in their announcements, hospital beds in abundance but close inspection will show that they are very poorly handled for teaching purposes and so far as systematic work and records in the average clinic are concerned frequently neither systematic work is conducted nor useful records kept. Along with this question of paid clinical professorships, goes the equally important question of adequate hospital facilities for teaching purposes as well as the providing of an internship for every medical graduate in order that no degree of M.D. shall be granted until this fifth year of clinical experience obtained as interne in a hospital shall have been covered.

The hospital survey now being conducted by the American Medical Association in the United States is certainly to be commended. Many other points of great importance are covered in this report, but the ones mentioned

are of great interest to those who are studying the problem of medical education in America. After reading this report, it does not seem possible that any man, lay or professional, can be content to stand idly by and not make every effort possible to offset the attack now being made upon standards and ideals for medical advancement.

The "Practitioner" again asks its readers as it did in the June issue what they intend to do about it? Shall we sit idly by and lose our medical law or shall we insist that our State and County Societies shall "get busy" before it is too late? Is the great and so-called "Progressive" State of California to deliver a blow at medical education which will encourage similar attacks elsewhere? The "Practitioner" prefers a fight to a surrender.

W. W. R.

HISTORY OF SYPHILITIC PATIENT AFTER "CURE."

Dr. Marie Kaufmann-Wolf has reported the later histories of a number of cases of syphilis treated under the direction of Fleiner in the Heidelberg Clinic in 1891, and reports the results of these observations in the *Zeitschrift für klinische Medizin*, vol. lxxv, no. 3-4. The report shows that a large percentage of the cases were evidently not cured. In a large number of cases the life partner was infected, and there was a high percentage of syphilitic offspring, abortions and sterility. The recent arsenic therapy may improve these results in the future, but probably most is to be accomplished by continuing treatment until there is a permanent disappearance of the Wassermann reaction and the luetin test.

HONORS FOR COL. GORGAS.

Johns Hopkins, jealous above most American universities for the dignity of its honorary degrees, has recently conferred its LL.D. on Assistant Surgeon-General Gorgas, chief sanitary

officer of the Isthmian Canal Zone. Honorary degrees have already been conferred on this distinguished medical scientist and administrator by the University of Pennsylvania, by Harvard and many other institutions, among the first of them the University of the South, where the name of his father will always be honored as its first Vice-Chancellor. Dr. Welch, president of the Rockefeller Institute for Medical Research, said in presenting for academic honor this distinguished Churchman that Colonel Gorgas had given to the world "the most complete and impressive demonstration in medical history of the accuracy and the life-saving power of our knowledge concerning the causation and mode of spread of certain dreaded epidemic and endemic diseases. He it was who, by application of the discoveries of Major Reed and his colleagues of the Army Yellow Fever Commission, was mainly instrumental in freeing Cuba of yellow fever, and he it is who, in spite of obstacles and embarrassments, has made the construction of the Isthmian Canal possible without serious loss of life or incapacity from disease—a triumph of preventive medicine not surpassed in importance and significance by the achievements of the engineer. In the conquest of science over disease, in the saving of untold thousands of human lives and human treasure, in the protection of our shores from the once ever-threatening scourge of yellow fever, in the reclamation to civilization of tropical lands—in results such as these are to be found the monuments of our laureate, his victories of peace, to which this university now pays tribute by such honor as it can bestow."

CHURCHMAN, July 6, 1912.

EDUCATE THE PUBLIC REGARDING CANCER.

Since Germany started a campaign of education of the laity regarding cancer, there has been a marked reduction

in the number of inoperable cases in the German clinics. In the United States the death rate from cancer was 5.1 per cent., according to the mortality statistics of the Census Bureau of the United States government for 1910. At the present time, there are more deaths from cancer than from tuberculosis, in those past forty years of age. Let us educate the laity, that many of these lives may be saved. There need be no morbid fear of producing cancerophobia to any greater degree than tuberculo-phobia was caused by the anti-tuberculosis campaign. Both these phobias may be unpleasant, but they have practically no mortality. All the suffering that may be caused by cancerophobia in all time is not to be compared by the suffering caused by a single case of cancer that reaches the inoperable stage.

The following, concerning the young mother and the fat hog, is by J. N. Hurty, M.D., of Indianapolis, Ind., and appeared in the Medical Herald:

One time a little mother, who was only 25 years old, began to feel tired all the time. Her appetite had failed her for weeks before the tired feeling came. Her three little girls, once a joy in her life, now became a burden to her. It was—"Mamma, mamma," all day long. She had never noticed these appeals, until the tired feeling came. The little mother also had red spots on her cheeks and a slight dry cough. One day, when dragging herself around, forcing her weary body to work, she felt a sharp but slight pain in her breast, her head grew dizzy, and suddenly her mouth filled with blood. The hemorrhage was not severe but it left her very weak. The doctor she had consulted for her cough and tired feeling, had said, "You are all run down, you need a tonic." For a fee he prescribed bitters made of alcohol, water and gentian. This gave her false strength for a while for it checked out her little reserve. When the hemorrhage occurred she and all her neighbors knew she had consumption and the doctor should have known it and told her months before.

Now she wrote to the State Board of Health and said: "I am told that consumption in its early stages can be cured by out door life, continued rest and plenty of plain, good food. I do not want to die. I want to live and raise my children to make them good citizens. Where can I get well?" The reply was, "The great Christian State of Indiana has not yet risen to the mighty economy of saving the lives of little mothers from consumption. At present, the only place

where you can go is a grave. However, the state will care for your children in an orphan's asylum after you are dead, and then in a few years a special officer will find a home for them. But save your life—never. 'That is a cranky idea,' for a member on the floor of the Sixty-fifth Assembly said so. Besides, said he, 'It isn't business, the state can't afford it.'" So the little mother died of the preventable and curable disease, the home was broken up and the children were taken to the orphan's asylum.

A big fat hog one morning found he had a pain in his belly. He squealed loudly and the farmer came out of his house to see what was the matter. "He's got the hog cholery," said the hired man. So the farmer telegraphed to Secretary Wilson of the U. S. Agriculture Department (who said the other day he had 3000 experts in animal and plant diseases), and the reply was, "Cert., I'll send you a man right away." Sure enough the man came. He said he was a D. V. S., and he was, too. He had a government syringe and a bottle of government medicine in his handbag, and he went for the hog. It got well. It wasn't cranky for the government to do this, and it could afford the expense, for the hog could be turned into ham, sausage, lard and bacon.

Anybody, even a fool, can see it would be cranky for the state to save the life of a little mother, and it could not afford it either.

Moral: Be a hog and be worth saving.

Unfortunately in this respect we can not boast of the superiority of California to Indiana. What will we do about it?

HARD TO KEEP RIGHT FROM PRE-VAILING.

"It was by the most thorough organization that the defeat of the A. M. A. became possible. By combining the forces of all who believe in medical freedom we have thus far defeated every measure the A. M. A. has attempted."—From the National Eclectic Medical Association Quarterly for June, 1912.

OPERATIVE FINDINGS AT SECONDARY OPERATIONS.

This interesting subject is discussed by Polak in the June issue of the American Journal of Obstetrics. Polak's study includes the observation of 139 women, 42 of whom had previously been operated upon by himself and 91 by others. From these cases, the writer concludes that our failures may be attributed to: First, imperfect or

incomplete diagnosis; second, incomplete operations; third, badly chosen procedures; fourth, hasty toilet; fifth, insufficient after-treatment.

SEASICKNESS.

The journals are teeming with the usual myriad of remedies for seasickness. And they are all useful—sometimes. But any rational therapy for this affection, like the treatment of headache, must be based upon the cause of the symptom. The motion of the boat is not the only cause, or everybody would be seasick. Disordered digestion, improper diet, and nervous excitement are prominent factors in causation. A more thorough study of the etiology of seasickness would doubtless aid materially in the rational treatment of this affection. For instance, how much has disease of the ear to do with the development of seasickness? The whole subject is a fertile field for scientific investigation.

INDIVIDUALISM AMONG INFANTS.

The pediatricists are finally discovering that infants should be treated as individuals rather than as a class. This had long before been appreciated by the internists. Even the grandmothers knew about it. But it remained for the recent general recognition of the individualism of infants to unite the belligerent factions among the pediatricists. There was no other way to explain why some infants do well with a high percentage of fats, while to others all fat is detrimental; why there are such apparent discrepancies in the application of caloric feeding to infants; and why no so-called system of infant feeding is applicable to all these little people. In some Studies in the Nutrition and Digestion of Infants, Ladd (Archives of Pediatrics) reaches the following conclusions:

(1) As a result of the study of 82 infants with varying grades of indigestion and malnutrition, one may conclude that

many atrophic infants can be educated to take higher percentages of fat than are ordinarily given, with satisfactory results in weight development.

(2) The average rate of gain in atrophic and undeveloped infants who are fed upon whey mixtures with lactose for prolonged periods was 18 ounces per month. When malt sugar is substituted in these mixtures for milk sugar, the rate of gain is increased to 22.2-3 ounces per month, or an increase of 26 per cent.

(3) Two series of infants were fed upon plain cream mixtures with barley starch and the excess of sugar was supplied in the form of maltose (maltose and dextri-maltose). In one group the mixtures were not pasteurized; in the other group the food was superheated to a temperature of 212 deg. F. for twenty minutes. The rate of gain in each group was the same; that is, 21.4 ounces per month. Boiling the milk did not in any way lessen its nutritive qualities. The possibility of scorbatus was guarded against after several weeks of feeding by small daily doses of orange juice. Individual cases often did better upon the superheated than upon the raw milk.

(4) With an occasional exception the infants did not make satisfactory gains in weight until the energy quotient was raised to 140 to 160 and sometimes to 175 to 190. Generally speaking, the energy quotient is greatest when the weight development is farthest from that of the average normal infant, as determined by the weight chart.

(5) The quantity of food to be given an atrophic infant is only a little less than that which the normal infant of the same age receives, and is often from 1½ to 2 ounces more than would be given to the normal infant of the same weight.

(6) The detailed study of the weight and feeding charts in a large series of cases shows great variation in the individual requirements and the impracticability of applying general rules of feeding to the atypical and difficult cases.

INFLUENCE OF ANTIVIVISECTION ON CHARACTER.

The following is an excerpt from the excellent article in the Boston Medical and Surgical Journal, by W. W. Keen, M.D., of Philadelphia. You ought to read the entire series. We had thought of placing the following tables side by side, but, as you see, the achievements of the foes of research have not been sufficiently numerous to justify such an arrangement. Dr. Keen gives the following as having occurred during his professional life:

THE ACHIEVEMENTS OF THE FRIENDS OF RESEARCH.

1. They have discovered and developed the antiseptic method and so have made possible all the wonderful results of modern surgery.

2. They have made possible practically all modern abdominal surgery, including operations on the stomach, intestines, appendix, liver, gallstones, pancreas, spleen, kidneys, etc.

3. They have made possible all the modern surgery of the brain.

4. They have recently made possible a new surgery of the chest, including the surgery of the heart, lungs, aorta, esophagus, etc.

5. They have almost entirely abolished lockjaw after operations and even after accidents.

6. They have reduced the death rate after compound fracture from 2 out of 3, i. e., 66 in 100, to less than 1 in 100.

7. They have reduced the death rate of ovariectomy from 2 out of 3 or 66 in 100 to 2 or 3 out of 100.

8. They have made the death rate after operations like hernia, amputation of the breast and of most tumors a negligible factor.

9. They have abolished yellow fever—a wonderful triumph.

10. They have enormously diminished the ravages of the deadly malaria, and its abolition is only a matter of time.

11. They have reduced the death rate of hydrophobia from 12 or 14 per cent. of persons bitten to 77-100 of 1 per cent.

12. They have devised a method of direct transfusion of blood which has already saved very many lives.

13. They have cut down the death rate in diphtheria all over the civilized world. In nineteen European and American cities it has fallen from 79.9 deaths per 100,000 of population in 1894, when the antitoxin treatment was begun, to 19 deaths per 100,000 in 1905—less than one-quarter of its death rate before the introduction of the antitoxin.

14. They have reduced the mortality of cerebrospinal meningitis from 75 or even 90 odd per cent. to 20 per cent. and less.

15. They have made operating for goiter almost perfectly safe.

16. They have assisted in cutting down the death rate of tuberculosis by from 30 to 50 per cent., for Koch's discovery of the tubercle bacillus is the cornerstone of all our modern sanitary achievements.

17. In the British Army and Navy they have abolished Malta fever which in 1905, before their researches, attacked nearly 1300 soldiers and sailors. In 1907 there were in the army only 11 cases; in 1908, 5 cases; in 1909, 1 case.

18. They have almost abolished child-bed fever, the chief former peril of maternity, and have reduced its mortality from 5 or 10 up even to 57 in every hundred mothers to one in 1250 mothers.

19. They have very recently discovered a remedy which bids fair to protect innocent wives and unborn children, besides many others in the community at large, from the horrible curse of syphilis.

20. They have discovered a vaccine against typhoid fever which among soldiers in camps has totally abolished typhoid fever, as President Taft has so recently and so convincingly stated. The improved sanitation which has helped to do this is itself largely the result of bacteriological experimentation.

21. They are gradually nearing the discovery of the cause, and then we hope of the cure, of those dreadful scourges

of humanity, cancer, infantile paralysis and other children's diseases.

Who that loves his fellow creatures would dare to stay the hands of the men who may lift the curse of infantile paralysis, scarlet fever and measles from our children and of cancer from the whole race? If there be such cruel creatures, enemies of our children and of humanity, let them stand up and be counted.

22. As Sir Frederick Treves has stated, it has been by experiments on animals that our knowledge of the pathology, methods of transmission and the means of treatment of the fatal "sleeping sickness" of Africa has been obtained and is being increased.

23. They have enormously benefited animals by discovering the causes and in many cases the means of preventing tuberculosis, rinderpest, anthrax, glanders, hog cholera, chicken cholera, lumpy jaw and other diseases of animals, some of which also attack man. If the suffering dumb creatures could but speak, they too would pray that this good work should still continue unhindered.

THE ACHIEVEMENTS OF THE FOES OF RESEARCH.

Not a single human life has been saved by their efforts.

Not a single beneficent discovery has been made by them.

Not a single disease has been abated or abolished.

All that they have done is to resist progress—to spend \$500,000 in thirty years in Great Britain alone, and very large amounts of money in the United States—and to conduct a campaign of abuse and gross misrepresentation.

They apparently care little or nothing for the continued suffering and death of human beings, the grief and not seldom the ensuing property of their families, provided that 26 out of every 1000 dogs and cats, monkeys and guinea pigs, mice and frogs experimented on shall escape some physical suffering.

They insist, therefore, that all experimental research on animals shall stop and—astounding cruelty—that thousands of human beings shall continue year after year to suffer and to die.

The Age of Experiment is the Age of Progress. This is true in mechanics, in engineering, in electricity, in every department of human knowledge in which experimental investigation is possible.

Medicine is no exception. Stop experiment and you stop progress. But while stopping progress in other departments only means that we shall have no further development in the external comforts and conveniences of life, the arrest of the experimental method in medicine means that progress in the knowledge of the cause and cure of disease shall stop and that our present sufferings and sorrowful bereavements from the onslaught of cancer, scarlet fever, measles, whooping cough and all the other foes of health and life—especially of our dear children—must continue.

In the last fifty years we have made more progress than in the preceding fifty centuries. I believe that if experimental research is continued and aided, the next fifty years will be still more prolific of benefit to mankind than even the past fifty.

I have absolute confidence in the humanity, the intelligence and the common sense of this nation that they will see to it that this progress shall not be

halted by the outcries and misstatements of the antivivisectionists.

Dr. S. Weir Mitchell, when visiting the Antivivisection Exhibition in Philadelphia, put the matter in a nutshell when he said to one of the guides, "Your exhibition is not quite complete. You should place here a dead baby and there a dead guinea-pig with the motto, 'Choose between them.'"

SUPPRESSION OF TUBERCULOSIS.

In the registration area of the United States during the last decennial period, there was a decrease of 18.7% in the death rate from tuberculous affections. During that period the yearly average of deaths from tuberculosis decreased from 1.969 to 1.603 per million of population. During the same time the general death rate declined only 9.7%, or from 16.550 to 14.950 per million. That is to say, some twenty thousand lives are now being saved each year that ten years ago would have been lost through the ravages of tuberculosis. All of which speaks well for the anti-tuberculosis propaganda.

FROM THE NORTH AMERICAN JOURNAL OF HOMEOPATHY.

"In their attitude toward the A. M. A. Homeopathic physicians may be classified into three camps: there are those who are supremely indifferent as to what this organization says or does, who practically ignore its existence and act on the principle that nothing is to be gained by either courting or fighting it; there are others of more or less militant disposition, who stand ready to fight the A. M. A. on every occasion, believing that 'no good thing can come out of Nazareth,' and that every move made by the organization is made to crush out homeopathy; and there is a third group consisting of those who, while still valuing homeopathy, also value the professional association of those who do not believe in homeopathy, and have thought that their personal interests and their value to the community would be best served by joining so-called old-school organizations, including the A. M. A."

GOOD.

"It can be said without qualification, that the medical profession refuses to accept either the Smoot bill or the Owen bill in its present emasculated form—and no majority that may pass either bill through either House need lay flattering unction to its soul that it is 'yielding to the demands of the medical profession' and thereby keeping its fences in good repair.

"We will have neither of these bills, and, what is more, we will not give up this fight until the American people shall have been properly safeguarded in their health and their lives by a properly constituted and organized National Department of Health. Recreant and truckling Congressmen and patent medicine men and food-poisoners can take notice."—*Lancet-Clinic*.

Nothing short of the ideal will satisfy the true physician.

**NERVOUS SYMPTOMS ASSOCIATED
WITH CHRONIC URETHRITIS
IN WOMEN.**

The great majority of the cases I have observed have shown muscular symptoms, the nervous supply of one muscle or of one or more groups of muscles being involved. A minority of cases have pain as the chief symptom. The group of muscles most frequently affected appears to be the extensors of the foot. Many of the patients trail the toes of one foot slightly on walking in the early stages. As the affection progresses, more and more muscles become involved, with a corresponding increase in the amount of paralysis or paresis. While the cases observed have included a majority showing evidence of some peripheral nerve lesion, there is no reason why a toxin, if the cause be a toxin, should not involve the spinal cord or even the brain itself.—John Campbell, M.A., M.D., F.R.C.S. Eng., LL.D., of Belfast, Ireland, in the *American Journal of Dermatology*.

**A MEMBER OF THE BOARD OF
EDUCATION.**

"I believe the advocates of medical freedom will win at the bar of public opinion their fight against the passage of the bill, before the Congress of the United States, wherein it is sought to 'Unionize' the medical profession, through an Act to establish a Health Department, under the control of a board of physicians."—Col. J. J. Steadman, in an address published in the *California Eclectic Medical Journal*.

Won't somebody please correct Steadman? We had always heard of him as an honest man, so we must regard his statement as the result of misinformation.

**MOVING PICTURE TUBERCULOSIS
EXHIBITIONS.**

In New York, moving pictures are being used by the Department of Health, for tuberculosis exhibitions in the public parks. In Los Angeles the Board of Education acted like it was taking a dose of castor oil when it permitted these to be shown in the public schools at the expense of the local Society for the Study and Prevention of Tuberculosis.

CHRISTIAN SCIENCE PRACTITIONERS.

We never did have much use for illegal practitioners. The variety known as Christian Science practitioners is particularly nauseous. These human (or inhuman) vultures prey upon the sick, for whom they pray for a price. It is bad enough for an illegal practitioner of the healing art to pretend to treat maladies which he knows nothing about, or the very existence of which he may deny. It is infinitely worse for such an ignominus (at least concerning all that pertains to the nature of the various diseases) to hold himself out to the public as a Christian Science

practitioner, under the claim that he is indulging in religious exercises, and then charge a fee as a practitioner of the healing art. What right have these illegal practitioners to the special privilege of practicing the healing art

for remuneration, without complying with the educational requirements that the State exacts of all other practitioners of the healing art? How long will we continue to permit this charlatanism of these wolves in sheep's clothing?

EDITORIAL NOTES

The Bulletin of the Johns Hopkins Hospital for July contains an article by W. S. Halstead, giving an excellent resume of the litigations of the common iliac artery since 1880.

The Parasitic Amebae of Man and Their Relation to Disease is the title of a practical paper by Charles F. Craig, of Washington, read before the Louisiana State Medical Society and published in the New Orleans Medical and Surgical Journal for June.

Dr. Samuel G. Dixon, commissioner of health for the State of Pennsylvania, says:

Why is our Government spending millions for the protection of our forests and our coals? Why is it making strenuous efforts for the conservation of our water supplies and other natural resources? What is the object of hoarding all these treasures which nature has lavished upon us if not for the service of man? Is it to the credit of our intelligence as a people that, while we give the guarding of these purely material interests a high place in our administrative scheme, we allow the man himself, without whom all else is worthless, to remain unguarded by continuing to neglect to establish a National Department of Health to properly protect his life, health, and vigor, the greatest of all national assets?

Tuberculosis alone, a preventable disease, now, costs the Nation \$1,000,000,000 annually; typhoid fever is estimated by Dr. George M. Kober, dean of the medical department of Georgetown University, to cost over \$300,000,000.

The conservation of human life constitutes, therefore, the grandest movement of the twentieth century.

Stacy, attending physician to St. Mary's Hospital, Rochester, in Notes on Carcinoma of the Uterus, the

American Journal of Obstetrics, reaches the following conclusions:

1. Cancer in its early stage is removable and hence curable.

2. Cancer of the uterus usually gives symptoms in that early, operable stage.

3. Most of the deaths from cancer are due to delay, either on the part of the patient or of the physician first consulted, and are, therefore, unnecessary.

4. The laity should be made to realize that any irregular flow, a constant bloody discharge, or a watery discharge are not due to "change of life," but, in practically all cases, mean malignancy.

5. The laity must be taught that cancer is curable if operated early, i. e., while still a local disease.

The Nation is now allowing 3,000,000 people to be constantly sick, and 1,500,000 to die annually. Dr. Charles Wardell Stiles, of the United States Public Health and Marine-Hospital Service, states that the United States is 7 times dirtier than Germany and 10 times as unclean as Switzerland. He declares that lack of interest in preventive measures against disease is slaughtering the human race:

Not long ago much was said about "race suicide." Is the real trouble in this country that not enough children are born or that too many are permitted to die? Is it "race suicide" or "race slaughter?" What real encouragement is there to the American mother to bear more children when the American father permits our country to be so behind the advance in science that we sacrifice over half a million American lives per year to preventable causes?

Dr. James A. Miller, of Santa Fe, passed away suddenly June 27th, from

heart failure. The Doctor was a graduate of the Cincinnati Medical College, and was well known and deeply respected. He was a civil war veteran, a member of Carleton Post G. A. R. He was a member of the Pennsylvania medical board, also of the Jefferson County medical board, and of the State pension commission.

Dr. Harvey W. Wiley, former Chief of the Bureau Chemistry in the Department of Agriculture, says:

An estimate of the value of the farm crops for the past year was \$9,000,000,000—it seems almost incredible. This is the wealth of the fields produced by agricultural industries for a single year. What is this worth compared to the health of 90,000,000 of people in this country for a single year? "What does it profit a man if he gain the whole world and lose his own soul?" What does it profit a man if he becomes a millionaire and loses his health? I would rather be a strong, vigorous man without a dollar than a moribund millionaire.

Dr. L. B. Coblentz, of Santa Maria, is east doing post-graduate work.

Those nations which have attempted to flourish by exploiting and destroying their resources of the present at the expense of the future—as Rome attempted to exploit and destroy those about her and as this Nation is now destroying its human assets—have always committed in the end industrial, political, and national suicide.

Dr. E. L. Enochs, of El Centro, has entered suit for ten thousand dollars damages against the Wheeler & Mateer drug firm of that place, for damages through a circular letter issued by the latter firm.

The loss from tuberculosis has been reduced to half of what it was 30 years ago. Nevertheless of the 90,000,000 people now living in the United States at least 5,000,000 will be lost by the Nation through this disease because adequate effort is not made to prevent it.

Dr. D. B. Wylie, of Phoenix, became lost in the desert and was rescued by a searching party after wandering for

three days and nights without food or water.

Besides the economic waste through deaths from any disease, the waste through sickness from the same disease is also colossal. Since the discovery of their causes, typhoid deaths and sicknesses have been reduced, but because of the present lack of adequate effort to prevent the remaining losses from the same cause, the number who will succumb to this disease in 1912 exceeds, as pointed out by the Equitable Life Assurance Society, the number killed in six of the greatest battles of the Civil War. This does not count the additional sufferers from the malady who do not succumb. It is estimated that the percentage of deaths from this disease in America is three times as great as the percentage in England, Wales, Scotland, Sweden, Switzerland and Norway.

It is reported that the Inspiration Consolidated Copper Company and the Miami Copper Company will unite in building a large new hospital for the use of the employes of both companies, to be located at Miami, Arizona. Dr. Bacon, now in charge of the Miami hospital, will be the physician in charge.

In Sweden, where simple rules of personal hygiene as to breathing, eating, exercise, and massage, are followed to probably a greater extent than in any other country, there has been no general increase in chronic diseases.

Dr. I. E. Huffman of Tucson has been appointed a member of the State Board of Medical Examiners, succeeding Dr. George F. Simpson of Winslow, who resigned.

Owing to the lack of vital statistics, it is impossible to tell accurately from how many industrial accidents the nation has suffered injuries and fatalities. According to the American Museum of Safety and Sanitation, it is conservatively estimated that during the year 1911 there were 500,000 of such accidents.

Dr. M. V. Silbermark, chief surgeon of the Austrian Red Cross, and his wife, Dr. Yella Silbermark-Reissig, were in Los Angeles recently in a tour of America.

One of the plants of the United States Steel Corporation in 1906, on a pay roll of 6,000, had 43 fatalities; in 1909, after making careful provisions for safety, on a pay roll of 7,000, it had 12 fatalities.

An excellent article appeared in the Los Angeles Herald July 3rd on Sleeping Out of Doors, written by Dr. Norman Bridge. The article is practically a refutation of the popular idea that draughts are dangerous. "If the body is kept warm and the head is protected, if necessary, no draught of air ever causes any sickness, and those who pass their nights on sleeping porches have fewer colds and other disorders than any other part of the community." Draughts are but gentle zephyrs and not dangerous.

The combat with poverty and oppressive conditions in industry is part of the combat with disease. To improve tenements, to provide decent work-rooms and hours of labor, and to suppress the white-slave traffic, will help control disease. In fact, poverty and disease are twin evils, each encouraging the other.

Dr. D. F. Royer of Orange has been appointed local surgeon for the Pacific Electric railroad. The Doctor has been surgeon for the Santa Fe for fifteen years, and also emergency surgeon for the Southern Pacific.

Among the "irregulars" there are those who believe still, as a religious faith, that disease does not exist." Those "irregulars" who have healing creeds based on a limited experience, or on hearsay, or on tradition, apparently believe that all other creeds in medicine are on an equally insecure foundation. They have compared medicine to religion, an affair of creed rather than of proof. Such "irregulars" exhibit an antagonism, similar to that which hounded Pasteur, to scientifically tested and proved meth-

ods employed by the "regulars." Senator Owen says:

With the record in Habana of the control of yellow fever, there are thousands of unlearned people who will ignorantly ridicule the means of the mosquito as an agency for transmitting this disease, who will deny the transmission of malaria by the mosquito. And there are thousands who will ignorantly deny that bubonic plague is transmitted by the flea from the rat and the squirrel to the human being. The power of the Government alone acting through its strongest arm is necessary for the prevention of a wholesale introduction into the United States of bubonic plague.

Dr. W. J. Nelson, a retired physician, suddenly died of heart failure at the St. Nicholas apartments July 6th.

An analysis of the arguments of the antivaccinationists shows that they "do not want vaccination but cleanliness," "do not want inoculation but to keep the blood pure," "do not want to destroy germs but to keep the body in good condition so that germs will not get a foothold." To the medical profession it exhibits a lack of knowledge concerning the proved chemical constituency or "purity" of the blood, and the known natural manufacture in it of serums.

The San Bernardino Health Board requested the appointment of a dairy inspector. The request was ignored by the City Council. Thereupon Dr. J. R. Laverman, president of the Health Board, resigned, refusing to serve longer without means to protect the health of the city. This was followed by the resignation of other members.

Charles R. Van Hise.¹

But, as this same conservationist puts it, "if the conservation of our natural resources is far man, it is an obvious suggestion that man himself should be conserved."

1—The Conservation of Natural Resources in the U. S., New York. Macmillan, 1910.

Dr. P. M. Savage has been re-appointed Superintendent of the San Bernardino County Hospital.

Says Mr. Adams:

No peril in the whole range of human pathology need have any terrors for the

man who can believe the medical advertisements in the newspapers. For every ill there is a "sure cure" provided in print. Dr. This is as confident of removing your cancer without the use of the knife as Dr. That is of eradicating your consumption by his marvelous new discovery, or Dr. Otherwise of rehabilitating your kidneys, which the regular profession has given up as a hopeless job.

The more deadly the disease, the more blatantly certain is the quack that he alone can save you, and in extreme cases, where he has failed to get there earlier, he may even raise you from your coffin and restore you to your astonished and admiring friends. Such things have happened—in the advertising columns of the newspapers—and pitiful groppers after relief from suffering believe that they may happen again, otherwise charlatanry would cease to spread its daily cure.

Drs. Tucker and Griffith, of Riverside, have added forty acres of land to their sanatorium site.

No one knows so well as the educated medical man the harm which the medical humbugs perpetrate. The "regular" doctors have been active, therefore, in bringing about State legislation to restrict the amount of harm which the quacks can accomplish and in instigating prosecution under that legislation. The "regulars" have thus incurred the fierce wrath of the quacks, who hurl at the medical profession the stigma of "political doctors," and accuse them (because of working by societies and organizations) of being a "doctor's trust," attempting to get a monopoly of the entire business of healing and to restrict the "freedom" of the quack or, rather—as they cleverly put it—to restrict the "freedom of the people to choose [the quacks as] their practitioners."

Dr. and Mrs. Walter Jarvis Barlow are spending a vacation in Yosemite.

Dr. Clyde G. Walters of Los Angeles and Miss Mae Madge Ritter of Long Beach have purchased two lots at Ethelwyn Manor, just off San Vincent boulevard. It's a romance. The marriage is to take place in the fall, after the home is finished.

Samuel Hopkins Adams states:

Gullible America will spend this year some \$75,000,000 in the purchase of pat-

ent medicine. In consideration of this sum it will swallow huge quantities of alcohol, an appalling amount of opiates and narcotics, a wide assortment of varied drugs, ranging from powerful and dangerous heart depressants to insidious liver stimulants, and, far in excess of all other ingredients, undiluted fraud. For fraud, exploited by the skillfullest of advertising bunco men, is the basis of the trade. Should the newspapers, the magazines, and the medical journals refuse their pages to this class of advertisements the patent-medicine business in five years would be as scandalously historic as the South Sea Bubble, and the nation would be the richer, not only in lives and money, but in drunkards and drug fiends saved. The most degraded and degrading, the "lost-vitality" and "blood-disease" cures, reeking of terrorization and blackmail; the alcohol stimulants, as represented by Peruna, Paine's Celery Compound, and Duffy's Pure Malt Whisky (advertised as an exclusively medical preparation); the catarrh powders, which breed cocaine slaves; and the opium-containing soothing syrups which stunt or kill helpless infants; the consumption cures, perhaps the most devilish of all, in that they destroy hope where hope is struggling against bitter odds for existence; the headache powders, which enslave so insidiously that the victim is ignorant of his own fate; the comparatively harmless fake as typified by that marvelous product of advertising effrontery, Liquozone; and, finally, the system of exploitation and testimonials on which the whole vast system of bunco rests, as on a flimsy but cunningly constructed foundation. Ignorance and credulous hope make the market for most proprietary remedies. Intelligent people are not given largely to the use of the glaringly advertised cure-alls, such as Liquozone and Peruna. Nostrums there are, however, which reach the thinking classes as well as the readily gulled. Depending, as they do, for their success on the lure of some subtle drug concealed under a trade-mark name, or some opiate not readily obtainable under its own label, these are the most dangerous of all quack medicines, not only in their immediate effect, but because they create enslaving appetites, sometimes obscure and difficult of treatment, most often tragically obvious. —The Great American Fraud.

Dr. R. A. Cushman has moved from Santa Ana to Bridgeport, Mono county. The change is made for the benefit of Mrs. Cushman's health.

In his investigations of patent medicines Mr. Adams seems to have reached the conclusion that those patent medicines that lack the fraud element are practically nil.

Dr. and Mrs. J. N. MacDowell of Pasadena are away on a four months' invasion of Europe.

The animus against the American Medical Association is explained in the following quotation from the Denver (Colo.) Times, from an article entitled "Effort of quacks to retard the advance of study of diseases":

Ten years ago the medical schools were turning out thousands of graduates every year who knew more or less medicine, mostly less. Their ideas of chemistry, pharmacology, toxicology, and even physiology were hazy. Instead of prescribing for their patients, they gave the ready-made prescription of some proprietary manufacturer, who glibly gave a formula for every symptom that the physician might encounter.

The American Medical Association (now advocating the establishment of a National Health Department) began to investigate. It found that most of these remedies were branded falsely. That the formula on the outside of the package was not correct; that instead of containing, for instance, a new and efficient, absolutely harmless cure for insomnia they contained chloral hydrate mixed with a little perfume. Acetanilide was used copiously in nearly all of the medicines for fevers.

Charter members of the Pomona Valley Medical Society were the guests of honor at a meeting of that society June 27th.

The fight for pure food was a fight against the communism of greed. All the "interests" stood together. They felt that if one was sacrificed all might go; hence, every movement which was made to correct this condition of affairs by legislation was met with the united and thoroughly controlled lobby representing the "interests" of every description which were thriving on the sale of adulterated and misbranded foods and drugs. These interests did not fight in the open except on rare occasions. They tried to conceal their identity and their purpose and usually appeared as friends of pure food and drug legislation, and urged certain amendments or verbiage which, if adopted, would have let out the offenders, one and all.

If they could not succeed in this, they brought substitute bills with a show of honesty and yet full of flaws favorable to corrupt practices. They never for a moment ceased their active opposition, and to the legislator who did not look under the surface their arguments seemed somewhat plausible and were for many years effective.

President Taft, advocating new legislation by Congress to combat this patent-medicine evil, said:

At the time the food and drug act was passed there were current in commerce literally thousands of dangerous frauds labeled as cures for every case of epilepsy, consumption, and all lung diseases, cures for all kidney, liver and malarial troubles, cures for tumor and cancer, cures for all forms of heart disease; in fact, cures for all the ills known at the present day.

The labels of many of these so-called cures indicated their use for diseases of

children. They were not only utterly useless in the treatment of the diseases, but in many cases were positively injurious. If a tithe of these statements had been true no one with access to the remedies which bore them need have died from any cause other than accident or old age.

Unfortunately the statements were not true. The shameful fact is that those who deal in such preparations know they are deceiving credulous and ignorant unfortunates who suffer from some of the greatest ills to which the flesh of this day is subject. No physician of standing in his profession, no matter to what school of medicine he may belong, entertains the slightest idea that any of these preparations will work the wonders promised on the labels.

To more adequately cope with the situation Dr. Wiley has advocated the placing of the administration of the food and drug act in a Department of Health, instead of having it in the Department of Agriculture, where the interests of the consumer are sometimes necessarily subordinated to the interests of the producer. It is the producers—the farmer, cattle raiser, dairy and lumber producers—for whom the Department of Agriculture exists. These people represent commercial interests allied in methods and sympathy with the commercial interests which object to the pure-food law.

There are about 80,000 cases of cancer in the United States at the present time. What are you going to do about it?

The Federal Government has executive departments for looking after those assets of the nation represented in money, commerce, agriculture, etc., but there is no executive department looking after the greatest of all national assets—90,000,000 lives. Such health work as is done by the National Government is scattered among several departments, whose main work is unrelated—indeed, in some instances inharmonious—to health interests.

Number one of volume one of The Mulford Digest is before us. The excellence of the publication is attested by the fact that it is edited by Dr. George M. Gould. It is devoted particularly to serum-therapy, bacterin-therapy, vaccine-therapy, immunization, and drug standardization.

In the old yellow-fever days southern ports concealed the existence of the scourge lest their commerce should be injured. When recently a United

States Senator showed the prevalence of hookworm disease in certain Southern States, Senators from those States protested for fear the tourist business might be affected.

The Arizona Medical Board Examination was held at Phoenix July 11th and 12th. There were nine applicants.

That the Division of Vital Statistics furnishes the data indispensable for intelligent health work, and should be placed in a new department, devoted to health, is the opinion of Dr. Kober. He says:

The book-keeping of a steel plant would not be carried on in a sugar refinery. Vital statistics are woefully defective in this country and can only be improved by educational Federal work among State and municipal health officers, who would respect the advice of a Federal health agency officer more than that of the Director of the Census.

Dr. C. E. Phillips, who was recently at the Lankershim, declared that the Canal Zone is now the healthiest spot in the tropics. Dr. Phillips is assistant chief surgeon at Panama.

In Austria, where general industrial statistics exist, it has been found that there are more fatalities from accidents in agricultural industries than in any others.

Dr. and Mrs. R. T. Burr, formerly of Pomona, are staying with friends at 201 South Hancock street, Los Angeles, after several years at Panama.

Says Senator Owen:

We have had bureaus affecting the public health for 100 years. They are scattered in eight departments. They have been disconnected and without co-ordination. They have even been jealous of each other, the one nullifying and hampering the work of another. They have been without a responsible head because of this subdivision and because the chief of the most important of these bureaus, the Surgeon-General of the Public Health and Marine Hospital Service, can not express an opinion or give information until he has consulted the Secretary of the Treasury—a system that is absolutely ridiculous.

The Los Angeles Police Commission has accepted the offer of the Los Angeles Gas and Electric Corporation for the free use of a pulmonator. The ma-

chine will be kept at the receiving hospital. A pulmonator was recently successfully used in San Diego on a case of morphine poisoning that had remained unconscious over night.

Maj.-Gen. Leonard Wood, of the United States Army, states:

The discovery of the means of preventing yellow fever saves every year more lives than we lost in the Cuban war.

Dr. W. H. Stiles, who underwent an operation at the Ramona hospital, is convalescent.

Among some of the popular articles issued by the National Health Agency in Germany are the following: "How to keep well and capacitated for work," "How to live well and at a reasonable cost," "The alcohol question in relation to health and disease," "The social evil and far-reaching consequences of vice diseases."

These articles contain an immense amount of valuable information which can not fail to lessen disease by its educational influence. Our government publishes no such popular articles.

Orange county has voted for a bond issue, more for bridges than charity. Of the total \$80,000 was voted for a poor farm, county hospital and almshouse, and \$100,000 for new bridges in the county.

It is sometimes said that the cure for the evils of democracy is more democracy. And it is likewise true that the cure for the diseases of civilization is more civilization.

Says Dr. William A. Evans:

We are not criminal in our instincts, but poorly educated. I believe it was Emerson who said, in substance, that people do not obey laws which they do not understand. The laws of community life, the laws of infant growth, will never be obeyed until the people have more knowledge. The only potent law is the law of public knowledge and opinion.

He states that not only educational work by the city is needed before its citizens will fully obey the health laws, but that national health educational work is needed to aid local work. He also says:

Thirteen and one-tenth per cent. of the children born in Chicago die before

they reach the age of one year. In certain very poor parts of Chicago the rate is about three times as high. In these localities one out of every three babies dies before it reaches one year of age. Suppose a farmer were to lose his hogs, calves, or colts at the same rate—he would go straightway to the National Government for aid.

Our babies die because we do not know how to feed and care for them. We ignorantly allow our sentiments to control us in our care of the human kind. Ignorance is death, and many very wise people are very ignorant in the care of babies. A National Health Department would be a great educational institution. It would teach the laws of human life to all parents. When we are wise enough, our baby death rate will get as low as the hog-baby death rate is now; eventually it will get lower.

Santa Barbara is to have a new \$85,000 hospital, the Cottage Hospital, work upon which has just been begun.

A Bulletin of the Committee of One Hundred quotes ex-President Eliot, of Harvard University, on the subject of opponents to the National Bureau of Department of Health measure:

They also as a rule oppose medical research, vaccination, and the use of antitoxins of all sorts. They are opposed to the use of the collective forces of the community to protect people from the results of ignorance, superstition, and deceit. Unfortunately, diseases can not be successfully resisted—like ignorance and superstition—on the principle of respecting each individual's right to suffer, be sick, and die. Possibly there is such a right, but it can not be exercised without grave danger to many other individuals. Contagious diseases take effect on masses of people, and they can only be successfully resisted by collective action.

Dr. J. R. Cunningham of Tonopah had his diplomas from the Rush Medical College and the Chicago College of Pharmacy burned in the Tonopah block. Fortunately, he will be able to secure copies. Dr. Richards, with whom he is associated, suffered the loss of his office effects in the Tonopah block, while his private effects were burned in the Brokers' Exchange building.

Dr. Elbert Wing, one of our associate editors, has been appointed a member of the housing commission, vice Titian Coffee, resigned.

The female mackerel lays some 50,000 eggs, out of which on the average only 2 live to produce. As we rise in the

scale of life, both the number of offspring and their mortality are enormously reduced. In general, the higher the form of animal, the less the waste in producing children merely to be destroyed, and the greater the energy remaining for personal and race development. This truth was recognized in the fable of the fox and the lion. The fox, taunting the lion about having so few children, was told, "Yes, but every child is a lion."

Dr. Henry M. Field, once Professor Emeritus at Dartmouth College, died in Los Angeles July 11, 1912, at the home of his son, Elliott Field. Dr. Field was in his 74th year, and at one time was professor of therapeutics at Dartmouth College.

Hookworm disease in the South is remarkable not so much for its fatality, although that is large, as for the fact that it incapacitates its victims for work one-fourth to one-half of the time. Headway has already been made toward its extermination, showing that what the nation still loses from this disease is entirely unnecessary.

A public benefactor, name unannounced, is reported to have offered to expend \$25,000 in establishing a model dairy at a point about equi-distant from Redlands, San Bernardino and Colton, if the medical men would endorse the move. Thereupon there was formed a Riverside County Medical Milk Commission, which will furnish caps showing that the milk has been certified to by the commission.

Although the number of people suffering from syphilis in this country has been greatly reduced, there are still constantly ill from this disease at least 2,000,000, according to the statement of Dr. Prince A. Morrow, president of the American Society of Sanitary and Moral Prophylaxis. This constitutes one of the most serious wastes to the nation because of its blighting effects on future generations.

The following are the incorporators of the Medical Building Company of Los Angeles: H. Bert Ellis, E. C. Moore, Albert Soiland, C. W. Bryson, H. P. Barton, W. H. Dudley, W. H. Spinks, W. W. Butler, W. W. Richardson, E. B. Spencer, J. Rollin French, W. M. Lewis, S. P. Black, J. F. Cook and E. J. Cook.

Dr. C. G. Stadfield, College of Physicians and Surgeons U. S. C., class of 1910, is spending several weeks at the Mayo Clinics Rochester, Minnesota. While in Minnesota the Doctor thought he would try the examination of that state to see how it compared with California's. He passed with a high average.

Dr. W. R. Moloney of Los Angeles is taking post graduate work in New York City.

Dr. John R. Haynes of Los Angeles made a hurried trip to Chicago as a delegate to the Roosevelt convention.

NATIONAL SOCIETY OF ANESTHETISTS.

On June 6th, at Atlantic City, during the meeting of the American Medical Association and following a symposium on anesthesia, the National Society of Anesthetists was organized. Prof. Yandel Henderson of Yale, Chairman of the Commission on Anesthesia of the A. M. A., occupying the chair, those assembled for the symposium acting as a committee of the whole, proceeded to organization and elected the following officers for the year 1912-13:

President, James T. Gwathmey of New York; Vice-presidents, Charles K. Teter of Cleveland, F. H. McMeehan of Cincinnati, Yandel Henderson of New Haven; Secretary, William C. Woolsey, 88 Lafayette Ave., Brooklyn; Treasurer, Harold A. Sanders of Brooklyn.

The constitution and by-laws were ordered to be drawn up by the Executive

Committee and submitted to the society at its next meeting for adoption; all names submitted for membership, if qualified in the estimation of the Executive Committee, shall be considered as charter members if presented within a period of sixty days and accompanied by the levied due of three dollars.

The National Society of Anesthetists in this notice calls all those who are actively interested in this work to join its ranks and assist in developing the subject of anesthesia to greater perfection and more uniform safety.

WILLIAM C. WOOLSEY,
Secretary.

June 10th, 1912.

Sterilizer, practically new. Sold at sacrifice. A. Stilman, 1617 Millard St., Los Angeles.

LOCATION WANTED.

Physician, single, 28, California license, wishes position as assistant or partner to general practitioner in California. Four years successful general practice. Well qualified in surgery. Health good. Desire opportunity rather than great remuneration.

Address No. 123
Care Southern California Practitioner.

Graduate Male Nurse wishes Institutional position. A-1 reference. Address F. R. Mason, 920 W. 8th, Los Angeles.

If any physician or others have a more or less complete office outfit of apparatus, instruments and books for early sale they may find a purchaser in Dr. B. Robinson, Tonopah, Nevada, who has lost his by fire.

PRACTICE FOR SALE—Homeopathic practice in growing Southern California town. Collects \$4000 to \$5000. Address No. 6. This office.

BOOK REVIEWS

MUSKELSPASMUS UND DEGENERATION. Ihre Bedeutung für die Diagnose intrathorazischer Entzündung und als Kausalfaktor bei der Produktion von Veränderungen des knöchernen Thorax und Leichte Tastpalpation. By Francis M. Pottenger, A.M., M.D., LL.D., Medical Director Pottenger Sanatorium for Diseases of the Lungs and Throat, Monrovia, Cal.

This monograph by Dr. Pottenger appeared in Brauer's *Beiträge zur Klinik der Tuberkulose*, Bd. XXII, Heft 1. It embodies a complete description of the author's original observations upon the changes which occur in the neck and chest muscles in the presence of inflammations within the thorax, and also a description of the author's method of palpation, which he has designated as *Light Touch Palpation*.

In this monograph he discusses the cause of muscle spasm and degeneration, showing that it is most probably due to a reflex stimulation from the lung through the cord by way of the sympathetics and out through the motor fibres to the muscle. In this he considers the motor change analagous to the sensory changes which have been pointed out by Head. He then discusses the changes in the muscles as they are found in the presence of both acute and chronic inflammations within the lung, illustrating it by the very common disease, tuberculosis. He cites cases to show how the muscles are thrown into spasm when the inflammation in the lung first occurs and also shows that the degeneration is a later condition which comes on only after the disease has become chronic.

He shows how it is possible by observing the muscle conditions alone, to give a fairly accurate opinion as to whether an inflammation of the pulmonary parenchyma is present or absent, and also as to whether it is active or quiescent.

He then takes up the effect of muscle spasm and degeneration and discusses it in connection with the production of lag-

ging, offering a new explanation of this very interesting sign. He also explains localized flattening of the chest wall as it occurs in old pleurisies, empyemas and tuberculous conditions and shows how the pathology of the muscles is a factor in its production. He discusses at some length the relation of the muscle change to the anomalies of the upper aperture of the thorax, showing how his theory differs from that of Freund, who promulgated the theory of the shortening of the first rib and ankylosis of the first costosternal joint as a contributing cause of tuberculosis. He takes the opposite view that the tuberculous infection is probably primary and that the shortening of the first rib is due to the muscle spasm and trophic changes, and that the ankylosis of the costosternal joint is most probably a reflex disturbance of the trophic fibres supplying the joint and costal cartilage, the impulse coming from the inflamed lung through the cord, the same as that which produces the sensory and motor changes.

He then gives a very practical discussion of the effect of these muscle changes upon the percussion and auscultatory findings within the chest, showing how the muscle in spasm gives a higher percussion note and greater resistance to the finger than the normal muscles or a muscle that has been degenerated, and also shows how this same change in the muscles alters the note on auscultation.

This discussion is very important from a diagnostic standpoint, for it explains some of the causes of error which have heretofore been difficult to explain.

The last portion of the monograph deals with *Light Touch Palpation*. The author shows how it is possible to outline the various organs in the large cavities of the body by a simple touch, when these organs differ in density from those adjacent to them. The heart, the

liver, the spleen, the stomach when full or containing some gas, are readily outlined. The lower borders of the lung, both anteriorly and posteriorly, infiltrations within the lung, tumors in the abdomen or mediastinum, effusions, either in the pleura or peritoneum may all be accurately outlined by a touch so light that it barely indents the skin.

One very interesting feature about this method is that it totally destroys our previous teachings on percussion. We have been taught that while a light stroke will give us information as to conditions near the surface of the chest or abdomen, that a heavy stroke is necessary in order to determine conditions further from the surface. But this is not true. One can very readily prove this by placing his hands on the anterior or posterior portion of the chest, while someone percusses the other side of the chest very lightly. The slightest stroke, so light that it can hardly be heard, can be felt distinctly clear through the lung. He shows that the heavy stroke is unnecessary, and that even a touch so light that it barely indents the skin is sufficient to outline the deep borders of the organs.

This work of Dr. Pottenger's is not theoretical, but practical, and if applied in general routine physical examinations would make diagnosis easier, and help eliminate many errors.

We are also glad to announce that it will soon appear in English from the press of the C. V. Mosby Co. of St. Louis.

INTERNATIONAL CLINICS. A quarterly of illustrated clinical lectures and especially prepared original articles on treatment, medicine, surgery, neurology, pediatrics, obstetrics, gynecology, orthopedics, pathology, dermatology, ophthalmology, otology, rhinology, laryngology, hygiene, and other topics of interest to students and practitioners. By leading members of the Medical Profession throughout the world. Edited by Henry W. Cattell, A.M., M.D., Philadelphia, U. S. A. Volume II. Twenty-second Series, 1912. Philadelphia and London: J. B. Lippincott Company. Price \$2.

This is a standard, well-known publi-

cation, consisting essentially of monographs by prominent writers, upon a myriad of subjects that are of interest to the medical man. In this volume there is a timely article on Poliomyelitis, by Simon Flexner, M.D., of New York. Flexner declares that it is possible for the domestic fly to carry the virus of poliomyelitis on their bodies for several days, and the virus is able, also, to remain alive for some hours within their viscera. The disease seems to be disseminated by the sick human being and the well one who comes into intimate association with the sick. Among human beings, the most dangerous, probably, are those who suffer abortive attacks of the disease. The measures to be employed for its prevention are similar to those practised in diphtheria, scarlet fever, and all diseases in which respiratory infection is paramount. There should be strict separation of the sick and well. There must be destruction of the discharges which contain the virus; and a sufficient length of time must be allowed for isolation to make it at least highly probable that the infectious agent has disappeared from the nasal and buccal secretions. This period is at present based upon imperfect data; but experience indicates three or four weeks as a proper time. Although the virus of poliomyelitis is highly resistant, it is still subject to chemical destruction. Some of the destructive chemicals can be applied to the mucous membranes. Among them are hydrogen peroxide and menthol. Too much faith should not be placed in them. Chief reliance should be placed on cleanliness of the hands, face, etc., the destruction of the discharges, and the removal of the dangers of dust accumulation after the sick has been removed from the room. One attack of poliomyelitis is insurance against a second one. Hexamethylenamin is readily secreted in the cerebrospinal fluid and has some power, but on the whole is not very efficient.

OUTLINES OF GENERAL AND SURGICAL NURSING. By Winifred Frederick Lindsay, Superintendent of the Training School for Nurses of the Paradise Valley Sanitarium, National City, Cal. Loma Linda, Cal.: The College Press, 1912.

The long experience of Mrs. Lindsay, both as a nurse and as Superintendent of Nurses, has amply qualified her to write this work. It is not intended as a complete text, but rather as a working manual. It is a meritorious work, brief and concise. If ye reviewer were studying nursing, he would want this book. It contains a large amount of information in small compass.

THE CARE OF THE INSANE AND HOSPITAL MANAGEMENT. By Charles Whitney Page, M.D., Assistant Physician Hartford Retreat, Hartford, Conn., 1871 to 1872 and 1873 to 1888; Superintendent Connecticut Hospital for the Insane, Middletown, 1898 to 1901; Superintendent Danvers State Hospital, Danvers, Mass., 1888 to 1898 and 1903 to 1910; Member of The American Medico-Psychocological Association, The Boston Society of Psychiatry and Neurology, The New England Psychiatric Society, and The Massachusetts Medical Society. Boston: W. M. Leonard. 1912. Price \$1.

This volume of 154 pages was written by Dr. Page after forty years of service as Superintendent of hospitals for the insane, to advance the cause of non-restraint and humane treatment of the insane. Dealing with this difficult subject, the book shows ample evidence of the intimate knowledge and the patient touch of a practical man. The book may well be commended to those interested in this subject.

LANDMARKS AND SURFACE MARKINGS OF THE HUMAN BODY. By L. Bathe Rawling, M.B., B.C. (Cant.), F.R.C.S. (Eng.), Surgeon with Charge of Out-Patients, Demonstrator of Practical and Operative Surgery, Late Senior Demonstrator of Anatomy at St. Bartholomew's Hospital; Late Assistant Surgeon to the German Hospital, Dalston; Late Hunterian Professor, Royal College of Surgeons, England. 96 pages with 31 illustrations. Fifth edition, 1912. New York: Paul B. Hoeber. Price \$2 net.

The text of the former edition has been adhered to, but the illustrations have been improved. This is a small

volume, divided into five chapters and an appendix. In this limited space is crowded an immense amount of practical anatomical detail, such as the medical man values but finds so difficult to retain. It is an excellent help when brushing up for examinations, such as many of the states conduct. Withal, it is a most readable book, notwithstanding it deals with anatomy, a subject that too often proves dry and uninteresting to the reader.

ESSAYS ON GENITOURINARY SUBJECTS. By J. Bayard Clark, M.D., Assistant Genitourinary Surgeon to Bellevue Hospital, Consulting Genitourinary Surgeon to the Elizabeth General Hospital, Fellow of the New York Academy of Medicine, Member of the American Urological Association, Member of the American Association of Genitourinary Surgeons, etc. New York: William Wood & Co., 1912. Price \$1.25 net.

This a collection of ten essays on genitourinary subjects, forming a most readable volume of 174 pages. In the essay on Urethral and other germicides, Clark's experiments seem to show that argyrol, protargol, cresol, collargolum, and cargentos are not as efficient as a solution of silver nitrate, notwithstanding the lower price of the latter. These were bacteriological experiments, and no mention is made of the relative amount of irritation caused by these various agents.

BIMINI BATHS AND SANITARIUM.

The members of the medical profession were invited to a reception at Bimini, August 2nd. The Bimini Water Company is emphasizing the claims of a sanitarium. This is not an attempt to help float the stock issued for this purpose, for we understand that there is none of that stock on the market, but it is the intention of the Company to make the Sanitarium as justly popular as the Bimini Baths for recreation. The slogan "Swim at Bimini" is to be changed to "Sanitate at Bimini."

THERAPEUTICAL HINTS

A very satisfactory prescription in respiratory disorders, both of acute and chronic forms, will be found in the Tilden Company's Respirazone.

POULTICES SHOULD BE STERILE.

Prof. George Howard Hoxie of the University of Kansas in his most excellent book on "Symptomatic and Regional Therapeutics," states under the heading of localized inflammation that "the danger of infection should ever be in mind in applying a poultice, for the maceration incident to the poultice favors infection, even if in ordinary circumstances one might consider the area germ proof."

Again he refers under the chapter on

Pain, to the dangers from using dirty poultices and that skin affections have been added to the ordinary disorder when bread-and-milk or linseed poultices have been used to relieve pain.

It is thus noted how important then, it is, in the employment of a poultice for the relief of pain and inflammation, that a sterile and trustworthy product be applied. Inasmuch as poultices are a means of producing hyperemia by the use of heat and insofar as they do this better than by other means, it is interesting to observe that in the belief of Prof. Hoxie that "the clay poultices, known best in the form of Antiphlogistine, are the best to employ, as they are sterile and clean."

CALIFORNIA STATE BOARD EXAMINATION, SAN FRANCISCO, AUGUST 6, 7, 8, 9, 1912.

HISTOLOGY.

(Answer Ten Questions Only)

1. (a) Name three cutaneous glandular structures.
- (b) Describe the histological structure of one of them. Make drawing.
2. Describe a transverse section made through the lower half of the oesophagus and tell how you would be able to distinguish between it and one from the cardiac end of the stomach. Make drawings.
3. What microscopic features would enable you to distinguish a section through lung tissue from one through omental tissue. Make drawings.
4. What microscopic features would enable you to distinguish a smear of normal blood from one made from red bone marrow, both stained by Wright's method. Make drawings.
5. Tell how you would be able to distinguish a section from the thyroid gland from one from the prostate gland of an old man. Make drawings.
6. Describe minutely how a transverse section of a normal human appendix would differ from a like section through the duodenum of a rabbit. Illustrate with drawings.
7. Name the encapsulated nerve endings and describe four of them. Illustrate with drawings.
8. Name the varieties of cartilage, describe each, and name locations where an example of each is found.
9. (a) Describe a cell characteristic of the cerebellum.
- (b) Describe a cell characteristic of the cerebrum.
- (c) Describe a cell characteristic of the ganglion on the posterior roots of the spinal nerve.
- (d) Describe a cell characteristic of the retina.

10. Describe a striated muscle cell. Make drawing.

11. What characteristics would enable you to distinguish a cerebro-spinal nerve fibre from a sympathetic nerve fibre. Make drawings.

12. What microscopic characteristic features would enable you to distinguish a section of the kidney from one from the liver. Make drawings.

PHYSIOLOGY.

(Answer Ten Questions Only)

1. Describe the function of ciliated epithelium and give five locations where such epithelium is found.
2. What are the functions of the columns of Gall and Burdach in the spinal cord?
3. Describe the action of the muscles of the iris, giving course of their innervation.
4. What is the function of the Eustachian tube?
5. What are the physiological factors which make blood transfusion dangerous?
6. Does general blood pressure increase or decrease after a full meal? Give reasons for your answer.
7. How are heart rate and blood-pressure proportioned? What is the mechanism whereby this is accomplished?
8. To what general structures are (a) vaso-constrictor fibres distributed, (b) vasodilator?
9. What is the nature of the process of interchange of gases through the alveolar membrane of the lungs?
10. Describe the secretion of the small intestine (succus Entericus).
11. What is the function of the convoluted tubules of the kidneys?
12. What are the general functions of fats?

OBSTETRICS.

(Answer Ten Questions Only)

1. In breech presentation, occiput anterior, in what position would you place body of child in application of forceps to aftercoming head?
2. What do you understand by hyperemesis and what are the dangers?
3. In head presentation, occiput anterior but with extreme extension of chin so that face is presenting, mention three conditions, one of which must be present for successful delivery?
4. Give the number and names of the vertex presentations?
5. How would you make a diagnosis of the position of R. O. P.?
6. How would you make diagnosis of transverse position? Give management.
7. Describe placenta previa, giving symptoms and management.
8. Describe a pudendal hematoma. Differentiate between this and (a) adenomata, (b) abscess, and give the usual obstetric cause.
9. What are the dangers of breech presentation and what measures would you take to overcome them?
10. How would you make a diagnosis between extra uterine pregnancy and ovarian cyst?
11. Describe a successful method of preparing obstetric cases in private homes.
12. Discuss the matter of pregnancy occurring in fibroid uterus. Under what circumstances would you operate?

GYNECOLOGY.

(Answer Ten Questions Only)

1. Name and describe the ligaments of the uterus.
2. Name the varieties of ulcer occurring upon the external genitals and differentiate any two of them.
3. Define (a) Colpocele, (b) Cystocele, (c) Caruncle, (d) Tenaculum, (e) Menorrhagia.
4. Give differential diagnosis of abscess of the vulvo vaginal gland.
5. Give the symptoms of chronic infected endometritis.
6. Discuss the pathology of Retrodisplacement of the uterus.
7. Discuss the diagnosis of Retrodisplacement of the uterus.
8. Describe the gross and microscopical appearance of a fibro myoma of the uterus.
9. Give differential diagnosis between uterine fibro myoma and pregnancy.
10. Upon what would you base a diagnosis of carcinoma of the cervix uteri?
11. Give differential diagnosis of ectopic gestation shortly after rupture has occurred.
12. Classify tumors of the ovary.

BACTERIOLOGY.

(Answer Ten Questions Only)

1. How do Plague bacilli enter the human body? Give two common methods.
2. How would you distinguish between Treponema Pallidum and other Spirilla?
3. How do the Trichina Spiralis get into the striated muscles? Why are they not found in the other tissues?
4. Name the pathogenic organisms which may be found in catheterized urine.
5. What is a Bacterial Vaccine? How is it made?

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SVAPNIA possesses the following advantages over ordinary opium:

Freedom from mechanical impurities; elimination of undesirable alkaloids; definite morphine content (10 per cent); lessened tendency to nausea and vomiting; increased palatability; uniform results.

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Sample and literature on application.

6. Name five bacteria which may cause Acute Primary Pneumonia.
7. How does the body actively repel the invasion of pathogenic bacteria?
8. Name five germs which may be found in Abscesses.
9. In acute arthritis of the knee how would you proceed to determine the cause? Give detail.
10. Name the pathogenic organisms which may be found in the blood.
11. Explain in detail how you would make a laboratory diagnosis of a suspected case of Tertian Malaria.
12. What organism is usually found in the throat in Scarlet Fever, what causes Sleeping sickness, Ringworm, Uncinariasis, Vincent's Angina.

HYGIENE.

(Answer Ten Questions Only)

1. What disease probably causes the most sterility in women? How?
2. What do we understand by the term "Typhoid carrier?"
3. What is the cause of pneumonia, and what are the most important steps in its prophylaxis?
4. What diseases are causing the great mortality of the negro in America? Give some general hygienic suggestions for checking their ravages.
5. What great hygienic advance has been made in recent years in the construc-

tion of the school room? Give your idea, in a few words of a model school room.

6. For what great achievement toward the preservation of human life are each of the following men noted? Edward Jenner, Joseph Lister, Louis Pasteur and Robert Koch?

7. What steps should be taken by the Health Department of a municipality to control an epidemic of poliomyelitis?

8. Upon what conditions and temperaments does an arid climate at an altitude of 5000 feet or more usually act unfavorably? Whom would you advise to avoid a moist coast climate?

9. What are the most active steps now being made for the prevention of bubonic plague in America?

10. What is the theory of the prolongation of life by taking lactic acid in the form of buttermilk?

11. What condition of mind is most favorable to digestion? What advice would you give to a family in order to encourage this condition?

12. What should the health authorities of California do in order to be prepared for the opening of the Panama Canal?

PATHOLOGY.

(Answer Ten Questions Only)

1. After death from chronic arsenical poisoning describe the pathologic changes likely to be found.

2. Describe fully the relationship between Diabeticis Millitis and the liability to gangrene and the slow and difficult repair of wounds and injuries.

3. Give the pathology of Auricular Fibrillation or Heart block and what organic changes are likely to be found on autopsy.

4. Give the pathology of Tabes Dorsalis and draw a diagram of a section of the spinal cord in the dorsal region as you would be likely to find it in an advanced stage of the disease.

5. Describe the kidney as you would be likely to find it in a case of Chronic Nephritis in an old man who had been an excessive user of alcohol.

6. On microscopic examination what characteristic would cause you to decide whether a morbid growth was malignant or benign?

7. What is meant by infarct and where and under what circumstances are they most likely to occur?

8. Give the pathology of Herpes Zoster.

9. Describe fully why chronic Suppurative inflammation of the middle ear may easily become an alarming and often fatal disease and when this occurs what is usually the direct cause of death.

10. Describe the brain as you would be likely to find it after death from Senile Dementia.

11. Describe the pathologic changes you would find in the eye in an advanced stage of glaucoma.

12. Describe the condition on autopsy likely to be found in quickly fatal cases of Icterus Neonatorum.

GENERAL DIAGNOSIS.

(Answer Ten Questions Only)

Do not give pathology unless necessary for diagnosis.

1. Give causes of pain in left iliac region and differentiate two of the conditions enumerated.

2. Give symptoms and signs of acute anterior Poliomyelitis.

3. Differentiate an epileptic from a uremic convulsion.

4. Describe symptoms, course and complications of Pertussis.

5. Give the causes of jaundice in the adult.

6. Draw a diagram of the anterior chest wall and indicate thereon the position of the heart and the point at which the sounds made by each heart valve are best heard.

7. Give the symptoms and signs of simple glaucoma.

8. Describe a Syringo Myelia involving the posterior gray matter in the region of the central canal.

9. Give the differential diagnosis of cancer of the liver.

10. Differentiate Pyelonephritis from cystitis.

11. Give the cardinal points in the diagnosis and prognosis of Diabetes Mellitus.

12. Give the clinical and microscopical diagnosis of aestivo autumnal malaria.

CHEMISTRY AND TOXICOLOGY.

(Answer Ten Questions Only)

1. Describe the preparation of oxygen from potassium chlorate.

2. Name the compounds of silver which are insoluble in water.

3. Give the equation for the preparation of iodine from potassium iodide.

4. What is the action of water on salts of bismuth?

5. How is lactic acid made?

6. How are tannic and gallic acid distinguished from each other?

7. Describe in detail the process of extracting lactose from milk.

8. What happens when ethyl nitrate is boiled with caustic soda? Give the equation.

9. Give the chemical changes which take place in bread-making.

10. Show how alcohols are derived from water; how organic acids are derived from carbonic acid.

11. Name the poisons which may produce a measles-like eruption.

12. Mention at least ten important things to observe in making a post-mortem examination in a case of suspected poisoning.

ANATOMY.

(Answer Ten Questions Only)

1. Describe the arterial, venous, and lymphatic circulation of the small intestine.

2. Name the nerves and muscles involved in the following: (a) flexion of the thigh on the abdomen, (b) flexion of the foot on the leg, (c) flexion of the hand on the forearm.

3. Give the origin, course and distribution of the obturator nerve.

4. Give the surface markings of the liver, (a) area of absolute liver dullness.

5. Describe the origin, course and termination of the basilar artery.

6. Describe the origin, course and distribution of the 7th cranial nerve.

7. Give the boundaries and contents of Scarpa's Triangle.

8. Give the topography of the spleen on the abdomen, (b) pancreas.

9. Describe the membrana tympani giving its blood and nerve supply.

10. What vessels establish the collateral circulation after ligation of the third portion of the subclavian artery?

11. Describe the relationship between the tibia and fibula bringing out the general characteristics of each.

12. Describe the pelvis axis, (b) give the nerve supply of the sacro iliac joint.



The G. A. R. Captured Los Angeles Just Before We Went to Press. The Emergency Hospital Staff Consisted of Drs. A. W. Moore, Colloran, Malsbary, Wiley, Granger, M. Ellis, E. Swift, L. Schroeder, Huggins and Claire. Aide, Mr. G. F. Nurminger, and Nurse, Miss Helen Stanley. Only a Few of the Veterans Required Treatment.



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THE CEREBRO-SPINAL FLUID AND LUMBAR PUNCTURE. THEIR RELATION TO THE GENERAL PRACTITIONER AS DIAGNOSTIC AND THERAPEUTIC AIDS.

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Until comparatively recently the cerebro-spinal fluid was one of the least known of the body secretions, the spinal canal was considered inviolate, and little attention was paid to the very important diagnostic procedure known as lumbar puncture or rachiocentesis. Notwithstanding the fact that there has developed an enormous literature on this subject, from personal knowledge the writer is certain that both in general and hospital practice lumbar puncture is used by comparatively few and much information which the examination of the spinal fluid would give is consequently overlooked. The operation of withdrawing fluid is simple and as harmless as paracentesis and yields valuable data in a wide range of conditions.

As Kaplan¹ states, "The time is at hand when we will be able to exclude spinal cord or meningeal changes from a thorough analysis of the cerebro-spinal fluid." While the results are not invariably infallible, they compare favorably

with those obtained by other diagnostic methods. To illustrate its growing importance in only one disease, it is only necessary to refer to the fact that New York State now requires lumbar puncture with bacterial diagnosis in meningitis before supplying Flexner's serum for treatment.

History: Key & Retzius² in 1828 published studies of the spinal arachnoid space and thus laid the anatomical foundation for carrying out the procedure. Magendie³ in 1842 connected a tube with an animal's subarachnoid space and saw the spinal fluid rise and fall in the tube synchronous with the movements of respiration. Quinke of Kiel first described the technic of lumbar puncture in 1891. Nine years afterward the French (Widal et al.) recognized the value of cytological examination of the fluid. Since that time a vast amount of literature on the subject has accumulated and is easily accessible to the interested reader. The present article does not aim to do more than

emphasize the importance, the simplicity, and the harmlessness of the procedure and to briefly indicate such methods of analyzing the cerebrospinal fluid as is applicable by the average practitioner without special laboratory facilities.

Normal Spinal Fluid: It is a secretion of the ependyma, choroid plexus and *vela interposita*³. Clear; specific gravity 1.006 to 1.010; slightly alkaline ($=0.1\%$ sodium hydrate⁶). Contains 1% total solids, 0.2% to 0.5% serum globulin, about 0.8% inorganic matter, and a trace of a substance which reduces Feihling's solution (probably pyrocatechin), fat, cholesterolin traces of cholin, occasionally urea and from two to eight cells per cubic millimeter⁴ ⁵. Freezing point, -60° to -65° . The fluid secreted from the ventricles escapes from the fourth ventricle into the subarachnoid space by the foremen of Magendie and Luschka. It fills all spaces beneath the arachnoid and totals 100-130 cubic centimeters. According to various experimenters, it either escapes through the spinal lymphatics or into the venous circulation via blood capillaries. Its function is, according to Mott⁷, to give up water and carbon dioxide and take up oxygen and sugar. The ganglion cells probably produce the glycolytic ferment by which the sugar is converted into neural energy. By its mechanical arrangement it acts as a watery cushion for the cord and there are anatomical features which provide a self-adjusting mechanism for equalizing the pressure throughout the whole cerebrospinal cavity².

Abnormal Constituents: Affections of the central nervous system leave definite impressions on the cerebrospinal fluid. The absence of positive findings argues against such affection¹. The principal features of diagnostic value are tension, appearance, amount of globulin, presence or absence of reducing agent and cell count and differentiation (cytodiagnosis¹). Coline and neurine are found in degener-

ate conditions; sugar in diabetes, and bile in jaundice³.

Technic of Lumbar Puncture: The technic of lumbar puncture is very simple. At the Napa State Hospital it is a routine procedure, being carried out in the cases of the majority of the patients admitted. It is the writer's custom to "puncture" a series of from five to ten patients at one session, the whole series consuming but a few minutes. This statement is made to emphasize the fact that the operation is a minor one. Our method is to have the patient sit well back on a table facing away from the light, with his back so arched as to produce lumbo-sacral flexion. A strap or sheet passed under the knees and over the neck prevents sudden extension and affords the patient a brace in case of slight pain. Some operators lay the patient on his side with extreme lumbar flexion. To facilitate the estimation of tension, it is well to adopt one or the other position for use in a given series.

The fourth lumbar or the lumbo-sacral interspace is selected (the fourth lumbar interspace is located on an imaginary line drawn between the superior points on the cresta illiae). Tincture of iodine is applied to the site of puncture. A few drops of 3% cocain or ethyl chlorid anesthetizes the skin.

The best needle is one 10 c.m. in length and 1 m.m. in caliber composed of either irido-platinum or nickle with moderately blunt point and provided with a well-fitting stylet. It is grasped between the thumb, index and third finger and inserted a few millimeters to one side of the midline, the needle pointing slightly inward and upward (toward the spinal theca). As the point reaches the dura a distinct resistance is felt which is overcome by pressure exerted by the thumb of the operator placed over the butt of the needle. At this stage the patient usually complains of momentary pain. As soon as the point enters the subarachnoid space

there is a lessening of the resistance, which, to the experienced touch, is the signal to remove the stylet from the needle, when the fluid appears. From 5. to 10. c.c. is allowed to escape and is collected in a sterile centrifuge sedimentation tube. The needle is then withdrawn and the wound sealed with collodion. Occasionally, a flap of dura or a spinal nerve root will lie against the point, but can generally be pushed away with the stylet.

Rarely a "dry puncture" will be the only reward for the pains taken. Curschmann recommends the application of ice to the extremities in such an event. Some operators prefer the mid-line for the puncture. This is most applicable to children. Never aspirate from the spinal canal. Occasionally considerable blood is obtained through the needle. This usually indicates that the point has entered a spinal vein.

Lusk² has reviewed the literature dealing with the technic of lumbar puncture to which the reader is referred for an exhaustive consideration of the anatomical relations.

Tension: There have been various manometers recommended and used for estimating the tension of the fluids⁴ ⁶. Many investigators have concluded, however, that the information gained in this way is without practical value. By puncturing in a uniform position a comparison of tensions can readily be made. The writer uses the following classification:

1. Much decreased. 2. Decreased.
3. Normal. 4. Increased. 5. Much increased.

Normally, with the patient sitting, the fluid issues in droplets at the rate of about 100 per minute. The normal manometer pressure in terms of mercury approximates 35 m.m. in the sitting and 10 m.m. in the horizontal position. There is a difference of from 10 to 25 m.m. between infants and adults. It varies directly with the venous pressure in the sinuses and normally shows

rhythmic variations corresponding to the Traube-Herring waves of general blood pressure⁵.

Tension much increased in acute inflammatory conditions of meninges, especially tuberculous and epidemic meningitis and usually in hydrocephalus. Moderately increased in meningismus³, uremia, sometimes in cerebral tumors, early stages of anterior poliomyelitis⁹; traumatic neurosis¹⁰ and alcoholic habits²⁰. Normal or subnormal pressure seems to exclude acute meningeal inflammations unless heart is weak. Diminished or absent pressure occurs when there are chronic inflammatory adhesions⁴.

Appearance: Normally the fluid varies within narrow limits from clear to slight opalescent. Most authorities agree with Tuffier and Mellian that blood in fluid in course of cerebral traumatism establishes diagnosis of fracture. Some, however, disagree with their conclusion that a clear fluid rules out such fracture.

Pachymeningitis interna hemorrhagica occasionally shows a more or less transparent fibrinous coagulum saturated with blood pigment. Blood stained fluid occurs in birth traumata and sinus thrombosis⁸. Recent blood sinks to bottom of tube upon standing. Old blood permanently discolors fluid¹². A pale yellow hemoglobin-containing fluid occasionally occurs in acute paresis, spinal tumors,¹³ and severe jaundice. Tuberculous meningitis gives clear or slightly flaky fluid. Allowing tube to stand over night there appears a fine spider-web coagulum suspended from the surface, which enmeshes tubercle bacilli. Acute infectious meningitis gives cloudy, purulent fluid.

Globulin: As stated above, globulin is present normally in small amounts. An increase is observed in the following conditions: General paresis, cerebrospinal lues, tabes, meningitis¹⁶, angiosarcoma¹⁴, certain other tumors of cord, lead polyneuritis and lead encephaly¹⁰, acute anterior poliomyelitis²,

traumatic intracranial hemorrhage, cerebral arterio-sclerosis with softenings³, and in nearly all postmortem fluids¹⁷.

By most observers the most satisfactory test for the determination of an increase in the globulin content is that devised by Noguchi¹⁶ and known as the "butyric acid reaction." Two parts of spinal fluid are mixed with five parts of 10% Merck's C. P. Butyric Acid in physiological salt solution and are heated over flame and boiled for a brief period. One part of a normal solution of sodium hydroxid is then added quickly to the heated mixture and the whole boiled once more for a few seconds. The spinal fluid to be tested must be free from blood. Presence of increased amount of globulin is indicated by *granular* or *quite heavy flocculent* precipitate which gradually settles to the bottom of the tube leaving a clear, supernatant fluid. The velocity and intensity of the reaction varies in different conditions. The reaction should be noted within two hours. Normal fluid gives only slight turbidity.

The Nonne-Jones reaction shows itself by white ring at junction of spinal fluid and saturated solution of neutral ammonium sulphate in a pipette. Occasionally an apparently positive reaction is obtained in normal undiluted fluid, but not if the fluid is diluted one-half. May⁶ and Hough⁷ claim to have obtained positive globulin reactions in non-specific cases. Dunn and Stevens¹⁰ contend that, except in traces, the presence of globulin indicates organic disease of the central nervous system. It is the writer's opinion that it is not absolutely diagnostic, but should be used only in connection with the cytological examination and complement reaction of the fluid.

Reducing Substance: Normally present. Usually absent in the acute meningitides and present in chronic forms. Presence valuable in differentiating between rhinitis and cerebral rhinorrhea.

The simplest method for its determination is as follows: 7 to 10 drops of

fluid plus 3 c.c. diluted Haine's solution. Set tube aside for one hour and read result.

Cytology: Diseases which cause inflammation or irritation of the meninges or of the ependyma lining the ventricles give rise to an increase in number of cells in spinal fluid, the increase depending on the acuteness of the inflammation or irritative process and on the area involved.

Increase noted in general paresis, cerebrospinal syphilis, tabes, superficial gummata of the central nervous system, insular sclerosis, infective meningitides, herpes zoster, epileptics (89%),²¹ traumatic psychoses (neither two of foregoing conditions show increased globulin), acute anterior poliomyelitis, syphilitic eye conditions²², occasionally grave forms of delirium tremens³, sleeping sickness, and occasionally toxic exhaustive psychoses. Some cases of psychosis without syphilitic history (dementia praecox, manic-depressive conditions, etc.) may show a pleo cytosis, but here the question is raised as to the authenticity of the anamnesis. The cell count may be lowered by antiluetic treatment¹⁸.

Methods of Examination: The simplest Widal or French method) is to centrifuge 5 c.c. of fluid for 20 minutes. Carefully pour off fluid from tube and with capillary pipette remove sediment remaining. Smear and stain with Wright's stain. Examine under 1-12 oil immersion lens and No. 2 eye piece. We consider under 5 cells per field as normal, from 5 to 10 suspicious, and over 10 as positive. In a comparison between this and other more elaborate methods, Rehm²⁰ found very little discrepancy.

A method easy of application by general practitioners is to use equal parts of uncentrifuged fluid and 1% glacial acetic acid solution plus a small quantity gentian violet. Count in Turck chamber.

Fuchs-Rosenthal method: Use fresh, well mixed, uncentrifuged fluid. Draw up staining solution in white blood cell pipette to mark 1. then fluid to mark

11. Shake well and allow to stand five minutes. Shake again and place drop in a Fuchs-Rosenthal counting chamber (made by Zeiss of Jena and similar to ordinary counting chamber but ruled into 256 small squares and being 0.2 m.m. deep). Count cells in all squares, multiply by 11 and divide by 32. Result is number of cells per cu. m.m. The stain consists of 5% glacial acetic acid solution tinged with gentian violet. Normally there are about four cells per cu. m.m.

The method of differential determination of the cell content as devised by Alzheimer in 1907 and described in detail by Hough³ is too technical for use outside a pathological laboratory, but yields valuable information.

Red Blood Cells: Occasionally in normal fluids following accidental contamination during process of withdrawal.

Pathologically following fracture of skull and cerebral hemorrhage. Useful in differentiating between cerebral hemorrhage, embolism, and thrombosis¹⁰.

A fact to be remembered is that occasionally red blood cells take a blue stain similar to lymphocytes and are apt to be confused with same.

Bacteria: Tubercle bacilli found in spinal fluid sediment or coagulum (88% cases) in tuberculous meningitis.

Meningococcus within the pus cells in epidemic meningitis.

Other organisms such as pneumococcus, bacillus influenzae, etc., in other forms of infectious meningitis.

Treponema gambiense in sleeping sickness.

Other bacteria such as bacillus diptheriae, Bac. typhosis, Bac. coli communis and the pus organisms are sometimes found.

Wassermann Reaction of Spinal Fluid: Usually positive in general paresis (90%) and tabes (60%). Usually negative in cerebrospinal syphilis.

The spinal fluid always reacts negatively in syphilis without involvement of nervous system (Plant, Nonne et al.).

General Paralysis of the Insane: Shows a lymphocyte count generally under 100 and seldom over 200. Highest counts early in disease. By Alzheimer technic plasma cells are usually found (in contradistinction to cerebrospinal lues)¹³. Positive Wassermann reaction of both fluid and blood serum is the rule.

Cerebrospinal Syphilis: Shows a positive Wassermann reaction in blood and negative Wassermann fluid with high cell count.

Tubercular Meningitis: Shows increase of lymphocytes with perhaps a few polymorphonuclears (especially early). If the latter outnumber the former throughout the disease, it indicates a mixed infection.

Epidemic Meningitis shows great increase in polymorphonuclears (up to 3,000 per cu. m.m.).

Acute Anterior Poliomyelitis shows early a polymorphonuclear leucocytosis and perhaps the presence of erythrocytes and other abnormal cells. Later lymphocytes predominate. Still later the fluid may be cell-clear. In the Nebraska epidemic some cases were differentiated from meningitis only by cytodiagnosis.

Postmortem Spinal Fluid: This differs in many respects from that during life. The elements indicative of disease are often more prominent and in cases where an autopsy is not permitted much information can be gained by a withdrawal of spinal fluid. The reducing agent is usually absent and the fluid may become cloudy if not removed soon after death⁶. Most non-inflammatory cases show positive globulin at this time. Bigelow¹⁸ recommends using two needles at different levels. Frequently in tubercular meningitis where bacteria are not in evidence during life the fluid will be found swarming after death.

Coriat²³ discusses thoroughly the chemistry of the postmortem fluid.

Therapeutics: Lumbar puncture is the initial step in the introduction of tetanus antitoxin, Flexner's antimenin-

goecocic serum and autogenous vaccines into the cerebrospinal canal. Its use in connection with spinal anesthesia should be mentioned.

Recently some interesting experiments dealing with the injection of leucocytes into the canal in cases of tuberculous meningitis have been published²⁵. Others have reinjected the withdrawn fluid after sterilizing same.

Relieving intraspinal pressure has been found highly useful in hydrocephalus, meningitis, chronic neuralgia, following zoster, headaches of syphilis and Bright's disease, crises of tabes, occasionally in Huntington's chorea, frequently in epilepsy¹², convulsions of general paresis and uremia. It is recommended following skull traumata, tinnitus and aural vertigo is sometimes relieved. Ravout²⁴ reports improvement in certain skin diseases such as pruritus, circumscribed lichen, dry eczema, etc. Allaria reports recovery of case of scarlatinal uremia following rachiocentesis. Aposlolides²⁷ recommends repeated lumbar puncture following fracture at base of skull. This not only relieves pressure but washes out bacteria which otherwise might propagate.

Mercury, potassium iodid, and salvarsan have marked influence on pathological content of fluid. Hexamethylinamin is found in fluid as formaldehyde within two hours after ingestion. Experiments now being conducted in the Napa State Hospital clinical laboratory seem to indicate that in certain chronic meningeal infiltrations drugs are passed into the fluid in a much less degree than in normal cases.

Sequelae: Following the puncture the patient usually complains of slight headache for several hours. In some cases this may be severe or may last for several days, especially if the patient has not retired to bed immediately following the operation. Occasionally nausea and vomiting occur. There have been reported about 30 cases of death following rachiocentesis (Minet & Savoît & Hans-

sen), but in all cases there were other factors which may have caused the collapse. The many deaths occurring during spinal anesthesia should not properly be charged to the account of lumbar puncture². Paralysis have occurred from like causes. In a large series of punctures the writer has never seen the slightest permanent discomfort on the part of a patient following the operation. The greatest danger is carelessness due to lack of asepsis. Abducens paralysis has occurred in one case (quoted by Ebricht⁸).

Contra Indications: Where cerebral tumor is suspected or where the intraspinal pressure is found to be very high, it is wise to discontinue the procedure. Hanssen²⁶ warns against this procedure in heavy drinkers, but the writer's experience at Napa where there is a large admission under the Intemperance Act does not bear this out.

Conclusion: In conclusion the writer would disagree with so distinguished an authority as Oppenheim, who advises that lumbar puncture should never be done unless there exists an indication for same. In several cases studied at Napa State Hospital, some of them admitted under the Intemperance Act as sane and without any marked clinical symptoms at the time of admission, there have been demonstrated pathologic fluids and further observation has substantiated the laboratory diagnosis of chronic meningeal change. Mills reports that at Central Islip State Hospital there was the difference between 6.36% and 11.41% of admitted cases diagnosed as general paresis before and following the routine use of lumbar puncture.

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THE EFFECT THAT THE PRESENCE OF MINOR PHYSICAL DEFECTS HAVE ON THE HEALTH AND PROGRESS OF THE SCHOOL CHILD.*

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There is no question confronting the medical profession to-day of greater importance, than is that of the present status, or rather character, of children's education. There is no problem to my mind, that demands more careful consideration and thought, not only by the medical, but by the educational profession as well. Because in that question is involved everything that relates to the future progress and welfare of this great nation; and furthermore, there is no question of so great concern, and at the same time also, of such far-reaching importance as all that is embodied in this one great question, viz., "*The Education of the Child.*"

I believe that I am not stating too much when I say, that we are confronted in this country of ours by possibilities that are great, and if we take advantage of these possibilities, it will only mean a continuance of national prosperity. While on the other hand, if we do not

avail ourselves of those possibilities or opportunities, so to speak, I know of no automatic machinery of itself, that in spite of us, will guarantee continued prosperity to this land. If we are going to have it, we simply have got to earn it, because there is no easy plan or method whereby all this can be secured, unless we do earn it.

The wonderful achievements that are daily being made in the realm of preventive medicine, are but forcibly answering that great question, "Am I my brother's keeper?" Just let me say, that in that answer of "Yes," there is embodied more than a sentimental, or for that matter, a religious reason. There is not only a practical, but there is at the same time as well, a self-protective reason, simply because every portion of a community should, and certainly ought to be interested in the sanitary welfare of every other portion. In fact I see no reason why this interest

*Read at Meeting of the State League of Municipalities, Santa Barbara, California, October, 1911.

should not even go so far, that the more prosperous ought to interest themselves in preventing the less prosperous from living under unhygienic conditions, in insanitary dwellings, in violation of, and at the same time as well, with total indifference to the laws of health.

There is no man, woman or child in the civilized world to-day, and this fact I wish to particularly emphasize, irrespective of their place or station in life; whether it be in labor, in attending schools or churches, in fact for that matter, I might say, in the mere matter of their existence, but is a debtor to the knowledge that has come to them from scientific medicine. Education has been, and I sincerely trust will forever be, the corner stone of our great civilization. No permanent advance will ever be made unless our people are educated to the truth. Laws can never be made effective, unless the people want them enforced. There never has been any great advance made by force alone, and even when force alone has apparently succeeded, it has generally left as a result, an unjust and a more or less unstable condition thereafter. There is no question but that our civil war blotted out a great evil, but we must acknowledge the fact, that it left with us a race problem, that so far has never been satisfactorily settled. Notwithstanding all this however, I have an abiding faith in the public. Sooner or later, when made to think, it reaches a wise solution of the problem. Now if we but stop for a moment, and then if it is possible, -realize the many serious problems that now confront our people, more especially such as relate to this question of "Health Preservation," we certainly, I believe, are justified in demanding the hearty support and co-operation of the general public. Intelligent co-operation is absolutely necessary in order that all this character of work be made effective. There is no question but that our people should be taught, but is it not more important, and

as well also, essentially necessary, that our public school children should be taught something of the fundamental principles that relate to hygiene and right living. Furthermore, is it not necessary also, that at least these children should be made to understand, and be made to appreciate as well, the importance of pure air, pure food and pure water, together with that of the hygienic value of personal cleanliness. By way of illustration, just let me mention this fact, and that is: That the general public should be made not only to understand, but also be made to appreciate, that contagious diseases in children are to a large extent, unnecessary, and that by the simple adoption of some of the necessary and fundamental principles relating to this question of hygiene and right living, together with that also of competent medical school examination, all this type of trouble may be prevented. Now if the general public were only made to know this, I very seriously doubt if there would be any hesitancy on their part in only too eagerly demanding that the children now attending public schools of this country, be protected from disease.

As a result of twenty-five years, and more, in the active practice of medicine, together with the time that I have been able to give to the study and observation of the child, extending over a period of nearly twenty years experience as a health officer, I am satisfied that a child until it goes to school is, as a general rule, free from infectious and contagious disease. The moment however, that the child enters school, then and there it is exposed to the dangers of infection, from which it rarely, if ever, escapes. It is a very noticeable fact now-a-days, that the *Physical Development First* and the *Intellectual Development Second*, of a very large majority of our present day school children, is the prevailing and dominant factor in our social life. The possibilities however, of preventing these children contracting infectious or

contagious diseases, by means of necessary and appropriate instruction, is I am sorry to say, not even thought of, or for that matter, is it even appreciated.

There is an important factor in this child question, simply by reason of the influence it exerts by its presence, now acknowledged to be, not only the cause for producing, but at the same time, having a decided effect on the *moral development* of a large number of our children. The presence of this condition (and the same no doubt, is equally true regarding the presence of any one, or other type, of these now prevalent minor physical defects), is one, I believe, that receives but little consideration by either the teacher or parent, and certainly but little, if any consideration by the laity. Now if this condition, and the influence that it exerts on the child by its presence, was understood and also appreciated, I very seriously doubt, if there would be any hesitancy on the part of any one, in acknowledging the effect it has as a hindrance to the proper mental and physical development of any growing child. As I have just said, these are conditions, that in the very large majority of children are entirely overlooked, and possibly are not even discovered, until the child has entered upon its school life. I have but to call to your attention: bad teeth, enlarged glands, eye and ear troubles, etc., which according to all of the reports that have so far been made in those places where medical school examination is enforced, only goes to show, that about fifty (50) per cent, and no doubt more, of all of the present day school children, are afflicted with some or more of these now prevalent difficulties.

There is no disputing the fact, that this subject of "child study," has, at the present time, become so universal a topic, that it has about reached the climax of a fad. "Child culture," has, I believe as well, absorbed society to such an extent, that it is fast losing all

of its past dignified prestige. Some one has very wisely said: "That what a child needs now-a-days, is a little more wholesome neglect. He is studied and observed, cultivated and coddled, until he cannot take a long breath, and take that breath naturally."

Now there is no question to my mind, but that school life for the growing child between the ages of six (6) and fourteen (14), is growing more complex. The character of work that is now given to our school children, is without any question, far beyond their mental caliber. Too much tension is imposed upon these children. This continual tension, I believe will, sooner or later, and as a consequence, be bound to act disastrously and certainly cannot do otherwise, than act as a hindrance to the proper mental and physical development of the child. It requires no argument from me to prove, that *multiplicity of studies* for the young and growing child, cannot do otherwise than create a *superficial* and oftentimes, an *artificial mentality*. Where such a factor as this exists, so as to retard the efforts of any child in keeping pace with its class, there is produced, as a natural consequence, a condition that not only interferes, but at the same time also, decidedly affects the proper development of any growing child.

The alarming increase of these now prevalent types of minor physical defects in children, together with that also of the influence that they exert by their presence on the welfare and progress of the child, has been but little understood, or even appreciated, until within the past few years. Right here in this connection, let me say, that I do not approve of this present method of *school cramming*, especially where it is imposed upon the child that is afflicted with possibly some one or other of these types of minor physical wrongs; and furthermore I see no justifiable excuse for this lack of knowledge and inappreciation on the part of those who should, and who cer-

tainly ought to be, directly interested in this very important matter.

It is now no longer a question of doubt, on the contrary, it has already been conclusively proven, that the influence exerted on the child by the presence of some or other of these types of minor physical wrongs, is the principal factor in producing, in a great many instances, many of our dull, listless, lazy, stupid and backward children, while on the other hand, it no doubt, is the cause as well, for a number of the obstinate, unmanageable and even immoral children. Now if the physical wrongs of these children had been discovered in their early life, or for that matter, if their existence had even been determined by means of competent medical school examination, and then the appropriate after professional instituted, either as a means of cure, or simply as a measure of relief, I have no hesitancy in stating, and I very seriously doubt, if there is any one, even if I may be permitted to say, that has the *courage of his ignorance*, but what must admit, that any child thus afflicted, as a result of such treatment, would in all probability, be made to assume a more normal condition of a mental and physical well being.

There is another factor in this question that I believe to be worthy of serious and also considerate thought, and this should especially appeal to parents. In fact by reason of its importance, it should appeal to any one who has any regard or interest whatever in the progress and welfare of the child, and that is: do these minor physical defects have, or do they exert any influence by reason of their presence, on the child's moral and physical development? This question of *influence*, in so far as it relates to the effect produced on a child's proper development, is a subject that has received a great deal of thought and consideration on the part of many of the members of the legal profession. This is especially true, of those who are iden-

tified with juvenile courts, and as a result of their conclusions, based entirely on their observation and experience, it is now held: that in the case of a large number of these children, who are brought daily before these courts, charged with some form or character of criminal offense, and who probably are found to be afflicted with some one or other of these now prevalent types of minor physical defects, that if this wrong physical condition had been discovered in their early life, and had been treated, or for that matter, if this condition had even gone so far that it was only determined by means of competent medical school examination, and then the necessary and appropriate treatment instituted, as a resulting consequence, there would be a less number of criminals, a lesser number of reform schools, and as well, would there be lesser demand for juvenile courts.

As having an important bearing on this particular point in question, I wish to quote from a statement that was made not long ago, by Judge Mack of Chicago, a prominent member of the legal profession in that city, and one who has for a number of years, been intimately connected with the juvenile courts of that city as well. He said that he had come to understand that there was a close and necessary relation between the child with enlarged glands, the mouth breathing child and the criminal. Not only that there is the child, pale, weak and wan, working unsatisfactorily to himself and unsatisfactorily to his employer, but building up disaster, not only for the community of men, not only for the family connected with that child, but in a measure, for the entire community.

"In all of our large cities, the yearly death rate in children, more especially babies, is high. In the city of Chicago alone, about 6000 babies die each year. These are the babies of mothers of foreign birth chiefly, and yet these babies are just as dear to those mothers, as are the babies of any other

mother to them. These babies are sick for months, and after a period of pain and toil they pass away, and probably that is the cheapest thing for the city of Chicago, that could happen to those babies, as heartless as it may seem. An infinitely more expensive thing for that city, would be for those babies of poor physical development, to go on and become of school age, and then poor, weak, bent children to go into scrofula, with enlarged glands, mouth breathers, to come in competition with our children of the school room. What would be the result? The boy unable to maintain himself in the competition of the school room, would drop back, would play "hookey," just as innocently as you please. The next time he would play "hookey," there would be infused into him with that game of "hookey," a little more of the denied, and presently into that game of "hookey," there would be infused the element of outspoken crime. And so little by little, innocent at first, that boy would go into mental incapacity, and then into moral incapacity, and do you believe the community loses its relation to that child? decidedly no. The law of the statute book, is the law that is placed there by public opinion, and that public opinion is being largely shaped by men and women of *improper mental and physical attributes*. There is not an *ideal law* in existence. Every law is a compromise between that which we would have, and that which we have to put up with. And so into the web and woof of every administrative act, there is woven the life distorted of this child who did not have a fair physical chance, and that is the part of the *cost of poorly developed children* that the community is paying. Do you think the defective that goes into the poor house, has been shunted from your shoulders? Do you think that the man who died out yonder with consumption and has left a family of helpless children to be cared for by philanthropic societies, has been taken from the

shoulders of society? Just let me say, that those who are competent, are carrying every ounce of burden of those who are incompetent, whatever the character of that incompetence may be."

Now there is another very important factor in this child question, that is worthy of consideration, and one that cannot be overlooked, and that is: what value, if any, (and in this particular instance, I have reference to the health of the school child), has the health of the child to a community? This question was very clearly and ably discussed in a report recently rendered by Mr. Leonard P. Ayers, associate director of the department of the Russell Sage Foundation, before a meeting of the department of the Pennsylvania Educational Association. This report, or rather address, had reference more especially to the "*Relation of Physical Defects to School Progress*." It is only possible for me to quote the following striking statements. "Medical inspection," Mr. Ayres stated, "in the schools is saving Pennsylvania a considerable portion of \$2,160,000, which otherwise would be wasted on efforts to educate pupils, who, by reason of *removable defects*, are unable to profit by their instruction." In commenting on the effect that the presence of some or other of these now prevalent types of minor physical defects have on the progress of the school child, he said: "If the children in Pennsylvania are like their companions in Massachusetts and New York, about 60 per cent have seriously *decayed teeth*. These pupils require eight and one-half (8½) years to complete a course of study, that a child without defects would complete in eight (8) years."

"A child with *defective breathing* requires six-tenths (6-10) of a year longer to complete eight (8) grades of elementary school work. About one (1) school child in every seven (7) has *defective breathing*."

"The pupil suffering from *enlarged tonsils*, requires seven-tenths (7-10) of a

year to complete the course than does the normal, and about one-quarter ($\frac{1}{4}$) of the school children has *enlarged tonsils*.

"Children with *adenoids*, spend nine and one-tenth (9 $\frac{1}{10}$) years in the elementary grades, and those with *enlarged glands*, nine and two-tenths (9 $\frac{2}{10}$) years. About one (1) child in eight (8) has *adenoids*, and nearly one-half ($\frac{1}{2}$) of the pupils suffer from *enlarged glands*.

Dr. W. A. Evans, commissioner of health in the city of Chicago, in an address that he delivered before a meeting of the Illinois State Dental Association held in the city of Cleveland, Ohio, on the subject of the "Relation of Conditions of the Oral Cavity to the Health and Morals of School Children," said: "That the city of Chicago, something more than a year ago, discovered how it was losing by not having school inspection, and how having seen this, and understanding this, proposed that a remedy for the condition be found, and as a result, instituted school inspection."

I can only present to you just a brief synopsis of this report, the following however, I believe to be especially instructive. The city of Chicago, I understand, has in its employ, one hundred (100) school inspectors. "Each inspector has charge of a certain part of the city, and looks after not only the physical examination of the school children, but of school children for contagious and communicable disease. He not only looks for contagious and communicable diseases in these children, but also looks for contagious and communicable diseases in the section of city which he has in charge. In addition, these inspectors are supplemented by the services of forty (40) school nurses, whose functions are several; perhaps the most important of their duties being to see that the instructions given, and the discoveries made by the school inspector, shall be acted upon by those who are legal authorities in control of the children needing help."

These one hundred (100) school inspectors in 1909 examined 647,842 children. The number of school visits made was 59,159. The number of physical examinations made was 123,899. Now it must be understood, that the remainder of the nearly half million school children of the city of Chicago, did not have a physical examination by the school board during year 1909.

The most important, and particularly so the most noticeable fact contained in this report is: That of the 123,899 children that were examined, 63,199 (or about 51 per cent) were found to have some type or character of *physical defect*. Far and away, the most common *disability* found, was that of *bad teeth*. The number of children that had this defect, amounted to 44,485, or about 36 per cent. 16,945 of these children or about 14 per cent, had *enlarged glands*. 2,830 had some character of *ear trouble*. 27,655, or about 23 per cent, had *tonsillitis*, and 4,088 had *adenoids*.

The department of health of the city of New York, a few years ago, took seventy-seven (77) of these so-called "backward children," by that I mean, children who by reason of the presence of some one of these different types of minor physical wrongs, were deficient in their school work, and had failed to be promoted. These children, by their authority, were placed under the necessary and appropriate professional treatment. The report that was subsequently rendered regarding this procedure stated: "That all of the seventy-seven (77) have improved physically, and have been promoted. All but four (4) have done more in school in the past six (6) months, than in the previous two (2) years. One (1) child did three (3) years work during the past year, i.e. a child of eleven (11) years and backward, was promoted rapidly, and performed all the work that is required of a child six (6), seven (7) and eight (8) years of age. Now it is but natural to conclude that this rapid promotion of these children, was due

entirely to the improvement in their physical condition, which resulted from the removal of their *hypertrophied tonsils* and *post nasal growths*, which had so seriously interfered with their *breathing*, and consequently with their physical condition.

It would be nothing more than repetition were I to relate the result of the findings that have been made in other places where medical school examination has been inaugurated. I cannot however, pass over this portion of this subject, without briefly quoting the result of the findings of a recent medical examination made of the school children in the city of Washington, D.C. This report states: "That recent investigation of 43,000 pupils of Washington schools revealed this startling fact, that very large numbers had one or more physical defects, which should give a parent serious concern. One (1) in each thirty (30) was afflicted with *defective hearing*. One (1) in each twenty (20) pupils had *defective sight*. Six thousand and six hundred and ninety-eight (6,698) pupils, or about 15 per cent, had *defective teeth*, which needed attention and threatened the health of the child. Over 2000 were *mouth breathers*, suffering from *adenoids*, *enlarged tonsils*, etc., in a way that affects the physical health and the mind. Seven hundred and twenty-seven (727) were *ill-nourished*. Nine hundred and twenty-three (923) were *anaemic*. Appreciating the significance, and also the serious importance of the conditions found to be existing in these school children, the Monday Evening Club of that city prepared, and had distributed among the different schools in the city of Washington, 60,000 pamphlets devoted to this question of health, and at the same time also, arrangements were made whereby lectures could be given at certain times to these school children on this important question of "Health Preservation."

There is a factor in this child question, simply by reason of its present day influence, which materially hinders the

successful accomplishment of this much needed procedure, viz: competent medical school examination. These conclusions and opinions that are now held by a large number of our people at this time regarding the necessity for inaugurating this plan, to my mind, is simply the result of false teachings on the part of those who are not competent, nor are they qualified, to pass judgment on a measure of so great and of such vital importance. I believe that it is certainly a reflection on the intelligence of this country, that there should exist in these United States today an element who are opposed to any plan or method, whose sole object and purpose is to safeguard the health of our people. It is no uncommon circumstance, now-a-days, to hear it openly charged that the adoption of this proposed procedure, is nothing more or less than a "one-sided affair," a scheme or plan, so to speak, in which the doctor is the only interested party. Appreciating the importance and also the significance of this so-called argument, if in this instance, "suspicion" or "prejudice," can be considered as an argument, I concluded to ask the teachers in the grammar schools of my city, to give me their opinion of the mental and physical condition of the children that were attending these schools, and who at the same time, were under their immediate care and observation. For this purpose I prepared, and had printed, a card, and on this card, I enumerated in plain simple language, some of these now prevalent types of children's minor physical disabilities. From the one thousand (1000) cards that I distributed among these teachers, I received replies from 783. Only a few of these cards, let me say, were answered satisfactorily. Notwithstanding this fact however, I find that if these cards be taken as a whole, that they have fully served the purpose for which they were intended; because I find that every teacher has noted the existence in a large majority of these school children, of what in their opinion

is supposed to be, the presence of some one or more of these now prevalent types of minor physical defects. A summary of this investigation shows: That according to the opinion of these teachers, they believe, that between 40 and 50 per cent of these children are in need of *suitable medical attention*. In passing, let me say, that these 783 cards which I received as replies, represent 420 boys and 241 girls, and out of this number, these teachers believe that only 343 boys and 241 girls are in *good health*. 184 boys and 185 girls, a total of 369, a little less than 50 per cent, I find noted as only having a *good school report*. Now there is another very noticeable fact that I find that these teachers have noted, and that is: That only 219 boys, and the same number of girls, a total of 438, or about 54 per cent, have a *good physical development*. 91 of these boys, and 80 girls, a total of 171, about 22 per cent, have been classed as being *unduly nervous, excitable* or of *poor control*. About 37 per cent of these children, i. e. 170 boys and 120 girls, a total of 290, have *bad teeth*, are in need of suitable attention. 159 boys and 185 girls, a total of 344, about 44 per cent, have been noted as having some character of *eye trouble*, and 139 boys and 133 girls, a total of 272, about 35 per cent, are troubled with some form of *nose difficulty*. 101 boys and 76 girls, a total of 177, about 22 per cent, are afflicted with some character of *ear wrong*.

These figures, it must be understood, are not to be accepted as being correct, nor are they of themselves sufficiently accurate, upon which any positive opinion or conclusion can be based. Leaving all this however aside, the results that I have obtained by this investigation, and notwithstanding the fact also, that a number of these teachers indifferently answered many of the questions that I enumerated on this card, I find that this character of inquiry has fully served the purpose for which it was intended, because all of these teachers, by reason of

their observation and association with these children, have noted the existence, of what they consider in their opinion to be, the presence of some one or other type of these now prevalent minor physical defects, in a large majority of the children that are now attending the grammar schools on this city. Now, if we accept these results as being only partially correct, we must also accept these teachers' opinions but at the same time we must acknowledge that the opinions or conclusions of these teachers can only be considered as the off-hand expressions of some members of the laity. Furthermore, it must be understood, that these opinions were not influenced, nor for that matter, was any physician directly identified with this opinion. Now if we accept all that I have just stated as being correct, or for that matter, as being only partially correct, it certainly eliminates, at least it certainly should eliminate, any possible element of "suspicion" or "prejudice" so far as this particular case is concerned. On the other hand I believe, that it presents a very strong argument in support of the need for competent medical school examination in this school. If such were in effect, can any one doubt what the findings would be, if these school children were submitted to competent medical examination? If we but stop for a moment to consider, and then realize if we can, the full meaning of the conditions, as a result of this investigation of the children attending the grammar schools in this city, and then apply this same reasoning to all of the other schools in this state and country, I very seriously doubt, if there is any one, even if I may say, that has the *courage of his ignorance*, that can offer any justifiable excuse for not giving his hearty support and co-operation to this very necessary and important procedure, the adoption of competent medical examination in all of the schools of this country.

One of the most important factors connected with this question, and it is

a factor that now-a-days cannot for a moment be overlooked, nor even lost sight of, in fact it seems to be an element that characterizes any question of legislation, and this I believe, is particularly true, so far as it relates to health legislation, and that is: The feature of commercialism. We are, as is well known, a commercial nation. This great question of human life and this question of the preservation of the health of our people, is no part whatever of our foreign or domestic trade. It is otherwise however with the diseases of plants and the lower animals, for the simple reason that they are the chief source of our great wealth. While on the other hand, the preservation of the public health, and the prevention of disease, are as a consequence questions that are simply considered as being only of minor commercial importance. Swine erysipelas, black leg, Texas fever, scab, tick, etc., are of far greater importance, because they mean a loss of money.

Now it is not only a notorious, but I believe it is as well, an undisputed fact, that a Nation that is pre-eminently commercial, is abnormally blind (so to speak) to the necessity of preserving the health of the individual, that factor that goes to make up this nation's greatest asset, viz: "The National Health." I have but to call to your attention, that this nation appropriates millions each year for the purpose of deepening harbors, and the improvement of water-ways, for the promotion and benefit of commerce. How much money, do you suppose, has this nation ever appropriated for the purpose of preventing any one of these water-ways becoming public sewers? I have only to mention also, that the dairy interests of this country forced congress to enact laws regarding the manufacture and sale of artificial butter and cheese. Organized labor, as well, has repeatedly succeeded in its demands for legislation that were favorable to its interests. The same is equally true of our manufacturing, min-

ing, lumbering and many of the other great industries of this country. While on the other hand, all the appeals that have ever been made by those who advocate any character of legislation intended for the preservation of the health of the people, have simply spoken only to deaf ears. This idea of creating public sentiment, especially public sentiment in its relation to matters of health, is decidedly discouraging, and as well is it also, of a very slow growth. I am optimistic enough however, to believe, that if this public sentiment ever once becomes aroused, "the curve (so to speak) will suddenly take an upward turn." As an evidence simply of this fact, I have but to mention the universal interest, and also the universal sentiment that is now expressed regarding this great question of tuberculosis, a question, that to-day is not bounded by any state or national limit. "And just as this tuberculosis movement has grown from what might be said, as a merely medical, and also a universal and practical question, so eventually, I am confident, will not only the significance, but the importance as well, of this great question of health preservation, be accorded, and at the same time, it will receive this same character of thought and consideration."

In the consideration of this question of the effect that is produced upon the child by the presence of some one of these now prevalent types of minor physical defects, it has been my earnest effort to impress upon all those, who as health officers, and who perhaps are physicians, the serious importance of this question, and at the same time as well, have I endeavored to call to your attention the necessity for the inauguration of competent medical school examination in all of our schools in this state. In connection with this, I see no reason why some provision should not be made, so as to enable the physicians in our several different communities, to go to these schools and at certain times, tell

these children something of the fundamental principles relating to this important question of hygiene and right living. And right here, let me say, that I do not approve of this present method now in vogue in our schools, of teaching this so-called "physiology," for the simple reason, that I believe that all of these text-books do not present this subject to the child so as to interest or be of any profit to him. To my mind, this question of "Health Preservation," is purely and simply a medical question, any and all instruction relating to this matter, I believe, should be under the control and direction of the medical profession. This character of teaching should not be exacted of the teacher, nor should it be exacted of any one else, unless that person has had the necessary training and experience that will enable him not only to properly teach this subject, but at the same time as well, will enable him to impart that character of knowledge that will not only be serviceable, but as well also beneficial to the child in his daily life. This idea of requiring the child to describe the circulation of the blood, give the names of the different bones of the body, or possibly explain the digestion of a meal, etc. and so on, I am satisfied, is nothing more nor less, than time simply wasted. These are questions, I believe I can safely say, sometimes will stump the best of us, especially those of us who have been in the active practice of medicine for a number of years. Here it is, in my opinion, that the physician, by virtue of his professional training and professional experience, is the only competent person, that is qualified to impart to the child that character of knowledge, that will not only be profitable, but be beneficial also to him in his daily life.

I fail to understand, why my objection can be raised to the suggestion: That the teaching of this subject be placed under the control and direction of the medical profession. If this were possible, it would afford us an opportunity

to tell these children (and the teachers as well) something about adenoids and hypertrophied tonsils; what they are, and the effect they have by their presence on their proper mental and physical development. We might tell them something about bad teeth, and how they influence the digestion of a meal. If we did not tell them this and more, we ought to tell them "How to Keep Well," and "How to Avoid Disease." Now if we don't tell them all this, we certainly ought to tell them "What to do in case of an Emergency," or in other words, "What to do till the Doctor comes." As a valuable adjunct to all this, it seems to me that if the ministers of the several different church denominations, would on a certain Sunday in each month, preach a sermon that would contain a little more of earth, and a little bit less of heaven, and that should require their Sunday-school teachers to tell their children "How to Keep Clean," and possibly "How to Avoid Disease," the successful accomplishment of all this, if such could be made feasible, undoubtedly would result in producing a better type of citizens and voters, and unquestionably it would be the means for paving a cleaner and better pathway to heaven.

This question of the influence that is exerted on the child by the presence of some of these now prevalent types of minor physical defects, to the thoughtful and considerate person, ought to be considered as a very serious and important one. In fact, I believe it to be a question that is worthy of the earnest thought and consideration of any one that has any interest whatever in the welfare and progress of the child. For a number of years, I have been impressed with this fact: That as our people spend so much time and money in their efforts to purify the food supply, eradicate vine and tree disease, tick, Texas fever, and many of the other diseases of live stock, why is it not more important, that we should look after

the mental and physical condition of the children who are coming on to take their places as men and women to bring forth a new generation. Because a child is "dull" and "backward" in school, ought not necessarily to be considered the fault of the child, many times it is the fault of the parent or guardian of that child. A child that cannot *see* the lines on the blackboard, or who, for that matter, cannot *hear* the instruction of his teacher from his seat in the schoolroom, is certainly in no condition to study. The very fact that the "hearing" and the "sight" are faulty, puts that poor child out of the race (so to speak), and as a natural result, that child struggles and stumbles along, until finally the years of its school life is nothing more nor less than time uselessly spent. While on the other hand, if some of the attention that is now bestowed by a large number of our people upon chickens, dogs and even cats, was devoted to the betterment of the child, there would re-

sult, as a natural consequence, good health and as well would active blood and ambition abound, and a new life would be put into action. If we but stop for a moment to consider and realize then if possible the large number of poor, neglected children that are gathered today under the roofs of the many schools in this great country of ours, we ought to be able to form some idea of the number of children that are forced up against a fight, that without any doubt, would defeat even grown men and women themselves. It certainly ought to forcibly impress us with the necessity for giving the child at least an equal chance with the dumb animal. This State, no doubt, spends an enormous amount of money in supporting its schools, but I believe that a large part of that money is worse than wasted, because of that "system" that loses sight of its most important factor, viz., "The Health of the School child."

AMOEBIĆ DYSENTERY.

DR. WILLIAM T. ROTHWELL, LOS ANGELES.

The following cases came under my observation while serving in the capacity of interne in the Los Angeles County Hospital, during the years of 1910-11. The general study and supervision of these cases was directed by Dr. Dudley Fulton of the attending medical staff of that institution. It is with his permission that I report these cases:

Report of three cases.

Case A. Male. Age 30. Race, Armenian; cigar maker by trade.

Family History: Negative.

Past History: Diseases of childhood; general health always good, no venereal history. Smokes, does not use alcohol. Complaint: Severe diarrhoea, fifteen to twenty movements in twenty-four

hours. Pain in abdomen, tenesmus, and with thin, watery mucoid stools.

History of present complaint: In 1905 he left his native state, Turkey, and began traveling. In the fall of the same year while in Stratsburg, Germany, he was taken rather suddenly with a diarrhoea. After a few days stools became very frequent and he began passing some blood. Had considerable pain in abdomen at times and tenesmus in rectum when at stool. Lost weight rapidly, but after two months began to feel better and traveled on into Egypt, where he roamed about for two and a half years. The diarrhoea and bloody stools continued to bother him at times. During the winter months the attacks were more

severe than in the warmer seasons. In 1908 he came to the United States, landing in San Francisco. He began ranch life near Fresno, California, where he remained until the fall of 1910. During this time the diarrhoea continued to annoy him at intervals, though leaving him quite free from attacks during the summer months. In September, 1910, he came to Los Angeles and felt better than usual until December of that year, when he was seized with the severest attack of diarrhoea that he had ever experienced. The abdominal and rectal pains became intense, bowel movements watery and frequent, and contained blood at every stool. He lost weight rapidly, going from 210 to 145 pounds and became very weak. He entered the hospital the latter part of December, 1910.

Physical Examination: Sclera clean, conjunctiva not congested. Pupils react to light and accommodation. Teeth poor and badly kept. Tongue covered with a whitish coat. No general glandular enlargement. Heart and lungs normal. Liver somewhat enlarged; the upper border at the upper border of the fifth rib, the lower border at 2 c. m., below costal margin in the midclavicular line. The lower border distinct and sharp. No tenderness over liver area. Spleen not palpable. Kidneys in normal position. No abdominal tenderness. No tumor masses felt. Genitals normal. Musculature flabby.

Blood: Marked secondary anaemia; Leucocytosis of 15,000 with Polynuclear count of 75%. No eosinophilia.

Urine: Normal.

Feces: Thin, watery and mucoid in character, at times lightly stained with blood and at other times heavily stained with blood. Microscopically many pus and red blood cells, epithelial cells, animal and plant tissue fragments and many amoebae were seen.

Case B. Male, age 50, laborer; born in Ireland.

Family History: Negative.

Personal History: Diseases of childhood. Sciatic rheumatism ten years ago. Malarial fever five years ago. A dysentery eighteen years ago while in the southern part of the United States. Made good recovery after a period of six months. No history of alcoholism. No venereal history.

Complaint: Severe diarrhoea with frequent bowel movements, bloody and mucoid stools with much pain in rectum while at stool. Also general weakness and loss of weight.

History of complaint: Patient lived in and around Los Angeles for eight years prior to his illness. General health always quite good. No history of any dysentery since eighteen years ago, except for the present attack, which came on about two months ago when he began to be troubled with frequent bowel movements. After two weeks blood appeared in the stool with considerable mucous. At the time he was working in a restaurant on Seventh street in this city. He continued to work there until about three weeks before entering the hospital, when he became so weak that he was compelled to go to bed. Pain began to be very severe in the rectum and lower abdomen while at stool. He had from fifteen to twenty bowel movements in twenty-four hours.

Physical Examination: Patient poorly nourished. Skin pale. Eyes normal. Tongue coated. Teeth poor and badly kept. No general glandular enlargements. Heart and lungs normal. Recti muscles rather rigid. No abdominal distention or tenderness. No tumor masses palpable in abdomen. Liver not enlarged. Genitals normal. Musculature soft and flabby.

Blood: Secondary anaemia of moderate degree. Leucocyte count of 12,500, with 70% of the polynuclear variety. No eosinophilia.

Stool: Contained much mucous and many red blood cells and pus cells; also

undigested food particles and fat globules. The amoeba was found after repeated examinations.

Urine: Normal.

Case C. Male, age 32, Spanish laborer.

Family History: Negative.

Personal History: Born in Spain, where he lived until twenty-eight years of age; then moved to Old Mexico, where he lived for eighteen months. During the past two years he has lived in Southern California. His occupation has been that of a coal miner most of life. Since coming to America has worked at odd jobs. Habits—alcohol to excess, smokes and chews.

Past Diseases: Diseases of childhood; light attack of smallpox eight years ago. Severe laryngitis and bronchitis fourteen years ago, which lasted for three months. Two years ago while in Old Mexico he developed a severe dysentery with bloody and mucoid stools. About two months after the beginning of the attack he developed a right-sided empyema. The empyema was independent of any pneumonia or lung condition. The right pleural cavity was drained by operative procedure and the patient made good recovery. After the operation the dysentery was very much improved and assumed the form of a very mild occasional diarrhoea. Blood disappeared from the stool. Two months later the patient came to Southern California and felt fairly well, except for the mild attacks of diarrhoea every six weeks to two months until the present attack.

Present Complaint: Severe diarrhoea, blood in stools, which were frequent and at times almost continuous. Great weakness and dizzy attacks. Also swelling of feet and ankles.

Present Trouble: Began about one month before entering the hospital, at which time he was taken with severe cramps in lower abdomen; a diarrhoea

which was very severe, with from seven to twenty-five bowel movements in twenty-four hours. After a few days began passing considerable blood in stool, also mucous. Great pain developed in rectum while at stool and prolapsus of the anus occurred. Lost twenty pounds in three weeks. Feet and ankles began to swell about a week before entering the hospital.

Physical Examination: Patient fairly well developed, but seemed to have lost considerable flesh. Skin and mucous membranes pale. Eyes normal. Tongue covered with a whitish coat. Teeth poor. No general glandular enlargement. Chest wall rather flat with some depression above and below both clavicles—more marked on right side. A scar in right axilla at seventh and eighth ribs, a rib resection evidently having been done. Respiration chiefly abdominal; excursions of left chest better than that of the right. Breath sounds quite normal over entire left chest, but rather harsh with prolonged expiration over entire right. The harsh respiratory sounds more marked from apex of lung to fourth rib on the right. No moist rales heard. Heart apex beat felt distinctly in sixth left interspace just outside the mid-clavicular line. The heart beat regular and strong—one hundred and two per minute. The upper border of the heart at the upper border of the third rib, the right border 3 c. m. to the right of the sternum. The left border 9.8 c. m. to the left of the sternum. A systolic murmur heard all over the heart area but best at apex and transmitted to the left axilla. The second pulmonic sound accentuated, distinct and sharp. The second aortic sound clear and distinct. Abdomen not distended, muscles not rigid, but slight tenderness all over the upper border of the liver at the upper border of the sixth rib in the mid-clavicular line, lower border 5.2 c. m. below costal margin in parasternal line and 3 c. m. below costal

margin in the mid-clavicular line. Some tenderness all over liver area. Spleen not palpable. Genitals normal. Musculature of extremities flabby.

Blood: Secondary anaemia. Lencocyte count of 11,000.

Urine: Normal.

Stool: Pus and blood cells and many amoebae.

The Specific Cause.

The *Entamoeba Hystolytica*: This species was first differentiated by Schandin in 1903, although it had been previously studied in a thorough manner by Kartulis, Jurgens, Councilman, Strong, Musgrave and many others. It has been conclusively proven to be the pathogenic species causing amoebic dysentery.

Geographical Distribution: Its distribution is world-wide, but the disease occurs more frequently in tropical and sub-tropical regions. This specie of the amoeba has been demonstrated in the Philippine Islands by Craig and Ashburn; in China by several French investigators; in India by Fernside, Rogers, Powell, Duncan and Anderson; in Africa by Kartulis; in Europe, especially in Austria and Poland, by Hlava; in South America by Dessy and Maratta; and in the United States by Osler, Musser, Ellis, Doek, Patterson and others.

In a collective study of the occurrence of Amoebic Dysentery in the United States, Patterson records cases reported from Maine, New Hampshire, New York, Pennsylvania, Maryland, District of Columbia, Virginia, West Virginia, North and South Carolina, Georgia, Florida, Tennessee, Alabama, Mississippi, Ohio, Illinois, Missouri, Oklahoma and Texas. Long has reported numerous cases originating in California, particularly in the southern part. In this state, it is thought that the infection was originally imported by soldiers returning from the Philippine Islands and by immigrants from

Mexico and other sub-tropical and tropical countries.

While the disease is wide-spread in the United States and is probably much more common than is generally supposed, it has nowhere been reported as epidemic, but occurs in sporadic cases, in many of which the exact origin of the infection is problematical.

Morphology of the Organism.

The paracyte consists of a mass of cytoplasm, varying in size from 25 to 50 microns in diameter. It varies in shape when in motion, but is usually spherical when at rest. The cytoplasm is divided into two distinct parts, the ectoplasm and the endoplasm. The ectoplasm is clear and glass-like, while the endoplasm is less refractile and more granular in structure. The endoplasm contains: the nucleus which is invisible in most instances, several noncontracting vacuoles, red blood cells, crystals, debris, bacteria and other material that may have been engulfed by the organism. The movements of the organism are accomplished by extension and retraction of very distinct pseudopodia formed by the clear glass-like ectoplasm. Reproduction occurs by simple division and sporulation or germination.

There are a number of other amoebae found in the intestinal tract of man that are non-pathogenic which must be differentiated from the *Amoeba Hystolytica*. The *Entamoeba Coli* is probably the commonest intestinal amoeba and is one of the most difficult to differentiate from the pathogenic type. It is the only one that I will attempt to differentiate from the pathogenic organism because lack of space. The *Entamoeba Coli* is found in the stools of quite a large percentage of healthy individuals. It may also be found in the stools of individuals suffering from Amoebic Dysentery and other dysenteries. By numerous animal experimentations it has been proven that it does not produce dysentery. In

shape and size it resembles the *Amoeba Hystolytica*. The cytoplasm is not sharply defined into the ectoplasm and endoplasm as in the pathogenic form. Its nucleus is prominent and easily seen, which is not the case in the pathogenic form. Its pseudopodia are blunt, short and rather ill-defined, while in the disease-producing type they are sharply defined, long and finger-like. Its movements are sluggish, while the pathogenic form is actively motile. It seldom contains red blood cells within its body wall, while the pathogenic form usually contains large numbers. Its color is usually a dull gray while the pathogenic type is gray with a greenish tinge, due to ingested hemoglobin.

THE EXAMINATION OF THE LIVING AMOEBA.

The feces should be examined as quickly as possible after being passed, as the amoeba soon loses its motility when its surrounding temperature is cooled below the body heat of its host and after a few hours begin to degenerate. Although the specimen be allowed to cool and stand for two or three hours, the motility of the organism may often times be restored by warming. This is considered very poor technique and frequently leads to error in making a correct diagnosis, for they are much more readily recognized when actively motile. No disinfectant should be used in the stool which is to be examined, nor should such a specimen be mixed with urine. Water should never be mixed with the stool, unless it has been previously boiled as otherwise water amoebae may be mistaken for the paracytic amoebae. It is always well to give a saline cathartic before collecting the stool, as this tends to wash the amoebae from the intestinal walls. The feces are then collected in a warm, clean vessel and kept at body temperature until delivered to the examiner.

Preparation of a Microscopic Slide:

If possible a particle of mucous or blood stained material should be chosen. Most stools from Amoebic dysentery cases contain gelatinous material which frequently contains numerous amoebae. Such material should be fully examined. A loopful of the chosen particles is then placed upon a warm slide and diluted with warm normal salt solution or sterile water. It is then covered with a cover glass and gentle pressure used to spread the specimen. The hanging drop method is often valuable in the examination of these organisms;—a small drop of the stool properly diluted being placed in the centre of a cover glass and inverted upon a a cover glass and inverted upon a hollow ground slide ringed with vaseline. The preparation should be examined upon a warm stage with a one-sixth inch lens and a one or two inch eye piece. For the finer details regarding the cytoplasm and the nucleus as well as the reproductive changes it is necessary to use the one-twelfth inch. Oil immersion objective.

The examiner should not be content if he does not find the organism after two or three examinations is a suspicious case, but should continue to examine specimens of the stool until he is reasonably sure that the amoeba is not present.

Pathology: The pathology is found almost wholly in the large bowel, rectum and liver. The lesions in the bowel are most commonly observed in the rectum and just below the ileo-coecal junction in the large bowel. In mild cases they may be confined to one of these regions, while in the more severe cases the entire colon is involved. The most characteristic lesion of amoebic infection in the early stage, in the bowel, according to Craig, are small nodular areas which project from the summit of the folds of the mucous membrane into the lumen of the intestine. The musous membrane covering these

nodules is usually inflamed and when incised they are found to contain a greenish yellow viscid fluid of a gelatinous consistency which upon microscopic examination is seen to be composed of degenerated cellular elements, mucous and actively motile amoebae.

The next stage in the progress of the disease is indicated by the appearance of small ulcers formed by the necrosis of the mucous membrane covering the nodular elevations just mentioned. These ulcers spread by invasion of the surrounding structure both laterally and downward, becoming wider and deeper until finally the muscular coat of the intestine is exposed. A typical ulcer may be said to have the following appearance; the edges are considerably raised above the surrounding mucous membrane, irregular and very much undermined, presenting a very characteristic shaggy appearance, due to the necrotic and undermined tissue. The floor of the ulcer may be rough or smooth. The old being smooth while the more recent is usually rough being covered with necrotic material, pus and blood. A number of ulcers may coalesce forming one large ragged ulcer or several may be connected by sinuses.

The pathological changes in the liver are very important clinically, as a considerable proportion of all patients suffering from Amoebic Dysentery develop abscesses of the liver, and it is now a well established fact that the pathogenic amoeba is the direct cause of this peculiar liver abscess. Kartulis found it in 55% of 550 cases coming to autopsy. Councilman and Lofleur collected the data upon 1429 cases and found that 21% were complicated by abscess of the liver. Craig found 5% in 745 cases and in 78 fatal cases he found 33% were complicated by liver abscess.

The number of abscesses found in the liver may vary from one to twenty. For many years it was considered that a single abscess was characteristic of

an amoebic infection, but this is not borne out by autopsy experience. While there is usually one large abscess there are in most cases a number of smaller ones also. The large abscess occurs most frequently in the right lobe of the liver, its favorite location being in the dome of the organ close to the attachment of the diaphragm or in the under surface near the hepatic flexure of the colon.

The rupture of a liver abscess is a comparatively frequent occurrence and may take place into the abdominal cavity, the pleura, the pericardium or the adjoining viscera. Of twenty-four cases observed at the Army General Hospital in San Francisco no less than seven ruptured before death. Five broke through into the right pleural cavity and two into the left pleural cavity and pericardium.

The contents of an amoebic abscess vary with the character of the infection. In those in which the amoebae are present in pure culture, the material contained in the abscess cavity is very characteristic. It consists of a semi-fluid yellowish red or a chocolate colored mass containing shreds of necrotic tissue, red blood cells, pus cells and the amoebae. This material does not resemble pus unless there is a mixed infection with suppurative bacteria. Then it resembles an abscess due to bacterial agencies.

Treatment: Only the treatment instituted in the foregoing cases will be mentioned in this article. The diets of these patients consisted of soft and liquid foods. Only two meals per day were allowed, breakfast and noon lunch. At five-thirty each afternoon deodorized tincture of Opium in fifteen minim doses was given each patient. One half hour after the opium was given on the first day of treatment sixty grains of ipecac were given in five grain salol coated pills. On the following day fifty-five grains were given and decreasing five grains or one pill each day until the dose was decreased to

ten grains. The ten grain doses were continued for a period of two weeks. The ipecac pills used in the treatment of these cases were especially prepared. The salol coating was 1-16 of an inch in thickness, making it possible to give very large doses of ipecac.

Other treatment consisted of copious saline flushing of the rectum and lower bowel each day.

Results of the above cases were as follows: Case A experienced very little vomiting, but was quite nauseated at times, however not enough so to interfere with the treatment. On the third day some improvement was noted, as bowel movements and pain in the rectum became less. The patient continued to improve very rapidly and on the tenth day the symptoms of the

disease were entirely gone except that the liver had not decreased in size. The man refused to stay longer in the hospital and left apparently well. Case B also took the treatment without much difficulty and in seven weeks the symptoms had disappeared and the patient had gained about thirty pounds. Case C had great difficulty in taking the treatment. The nausea and vomiting were very persistent and at times severe. Many times he refused his medicine but with persuasion and a great deal of fortitude on the part of the patient, the treatment was carried out in a very interrupted manner. However the patient left the hospital after a stay of ten weeks in an apparently cured condition.

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PRELIMINARY REPORT OF TWENTY-ONE CASES OF PULMONARY TUBERCULOSIS TREATED BY DIORADIN.

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While we were not very much impressed with the literature we had previously read on the value of Dioradin, later reports finally led us to undertake a practical and unprejudiced trial of the method of treatment, in such cases as we felt we were warranted in adopting it, under the conditions as outlined in the following report.

The histories of the cases have been much abbreviated, particularly as to details of findings by physical examination. We have endeavored, however, to impartially present the general results of treatment, feeling sure that the main features of the cases are what will interest the members of the profession.

Brief reports of the 21 cases treated follow:

Case 1: E. E., male, age 21, single, egg packer, Roumanian by birth. Height 5 ft. 10 inches. Weight 150 lbs. Family history negative; father is living, mother died of enteritis. Seven brothers and sisters healthy. A year ago the patient had grippe, followed by chronic bronchitis, for which he used ordinary cough remedies, but the cough continued and gradual loss of weight followed.

When he presented himself he was suffering from a severe and continuous cough and had had two attacks of hemoptysis, the most recent one having been quite severe. Had lost 5 pounds, dyspnea was marked, was suffering from night sweats, and running a temperature varying from 99 to 102. Von Pirquet test positive. Sputum contained tubercle bacilli. Examination shows dullness at the left apex, and many small and large rales over the whole left lung.

Treatment was begun on October 3rd and consisted of daily injections of Dioradin for one month. For the first few

days the patient lost weight, on October 11th going down to 147 pounds, and the temperature at this time, after having been nearly normal for a few days, went up to 103.2. The increase of temperature and loss of weight were probably due, however, to the intercurrent acute urethritis which developed during the week, and this condition was treated simultaneously with the continuation of the Dioradin injections.

The treatment improved the general condition of the patient. His weight steadily increased so that on November 1st he weighed 155 pounds. During this month the injections were continued on alternate days, and on December 1st his weight had increased to 158 pounds. During December the injections were administered only twice a week, and on January 1st his weight had gone up to 160 pounds.

All this time he ran a very slight temperature, and while his general condition was satisfactory, the cough having practically disappeared, there were still a few moist rales at the left apex, so that during January injections were resumed on alternate days. He continued to gain, and by February 1st weighed 163 pounds.

During February and March injections were given on an average of twice a week and at the present writing cough is absent, there is no temperature, his appetite is good, and he feels and looks strong and well. Toward the end of the treatment Dr. Louis Pick saw the patient and found his lung in excellent condition, there being but the slightest suggestion of a rale at the upper left apex which can be detected only on very deep respiration. No tubercle bacilli can now be found in sputum.

Case 2: N. M., female, age 24, single, dressmaker, native of Ireland, in America 4 years. Family history negative; parents and eight brothers and sisters are all well. Menstruation did not begin till the age of 18, and was very painful. Had had bone tuberculosis for seven years prior, followed by a sinus which did not heal for a long time. She lately left the J. Hood Wright Hospital, where for 3 weeks she was treated for recent ptomaine poisoning.

When we first saw her, her general condition was poor; cough was severe, and within a few months she had lost 18 pounds. When the patient coughed, crepitant rales could plainly be heard in the left apex. Her digestion and appetite were fair, but she had marked dyspnea and was decidedly hoarse. Her temperature was never more than 99½.

Treatment was begun on October 10th until November 27th, being given on alternate days. Altogether she received 23 injections. Marked improvement began immediately. Her weight increased on an average of two pounds per week for the first five weeks and then a pound a week more, until she left the hospital on November 27th weighing 146 pounds, apparently cured. We have written to the patient twice since her discharge, in the hope of learning her present condition, but have been unable to locate her.

Case 3: W. H., male, age 43, married, porter, colored. Mother died of consumption. Patient is five feet 11 inches in height. Weight 113 lbs. He smoked and chewed excessively, and indulged

heavily in alcoholics. Used to have stomach trouble and rheumatism. About six months ago began to cough badly, and remained in a hospital for three months; also received treatment at the Roosevelt Clinic.

This was a very severe case. He was emaciated and weak. There was no hemoptysis, little pain, digestion and appetite were fair, and bowels regular. There was severe cough, constant expectoration, the sputum was loaded with tubercle bacilli, dyspnea was marked and the loss in weight amounted to 40 lbs. Temperature was 101, pulse 120.

After the first few injections the temperature decreased slightly, the patient felt somewhat stronger, and seemed slightly improved, but the improvement did not last, the patient rapidly grew worse and died.

Case 4: S. W., male, age 26, single, clerk. Family history; a younger brother had tubercular pleurisy two years ago, stayed in the Catskills for about four months, and came back with the condition arrested. Patient has been coughing for two months and has lost weight. Von Pirquet test positive. Shows dullness on percussion, at the left apex, and many moist rales over the same region. Temperature 99.6 every afternoon.

Treatment with Dioradin begun December 12th. At this time patient weighed 132 pounds. Took daily injections till January 1st; on alternate days during January, and every third day during February. Cough persisted until the 20th injection, at which time it seemed to disappear suddenly, and his weight which had remained stationary throughout the month began to increase. During January his weight had increased 6½ pounds, but made no further gain during February. He left the hospital in good condition, continued at work the whole winter, and feels decidedly well.

Case 5: A. S., female, age 38, single. Family history: mother died at 38 of tuberculosis, and father at 50 of Bright's disease. Eleven years ago patient entered the hospital with pneumonia, and has remained there since as a seamstress.

She has chronic hoarseness and large masses of tubercular glands on both sides of neck. Has slight cough and raises sputum. Weight 114½ pounds. Treatment was begun October 15th and the injections were made sometimes in the interscapular space and once a week into the mass of the tubercular glands on each side. These latter injections proved decidedly painful and were discontinued, subsequent injections being given in the interscapular region and buttocks. At the present time her weight is 117, and while 2 pounds is not a very brilliant increase after 5 months' treatment, the patient says that she feels very much better than she has for many years. The large masses have disappeared to such an extent that the small glands can now be palpated. This patient is still under treatment.

Case 6: F. R., female, age 25, single, clerk, family history negative. Had a cold four years ago which was followed by cough and hoarseness. Spent one year at Bedford Home for Incipient Tuberculosis. Came back not at all improved. Went to the New York City Hospital for Tubercular Cases at Otis-

ville and was there three months. Became worse. For three months took a series of tuberculin injections at Mt. Sinai Hospital under Dr. Rosenthal. Went to Mountindale three months but did not improve. Went to the Mt. Sinai Hospital Dispensary, and was treated in Dr. Taschman's Clinic by Dr. Konitz from October, 1910, to January, 1911. From January, 1911, to April, 1911, she was at Otisville under Dr. Rathburn. Bone tuberculosis developed there and when she returned to Dr. Konitz at Mt. Sinai, Dr. Leo Buerger was consulted for the surgical aspects of the case. Treatment at Mt. Sinai failed to cure the tubercular joints, and when we saw the patient they were unimproved.

Has not had hemoptysis for nearly a year. Coughed little, had no night sweats. The chief symptoms when we started treatment were hoarseness, the case being one of tubercular laryngitis, and tubercular joints. All treatment was discontinued except Dioradin injections. After three months her weight, which had been 125 pounds, increased six pounds. The hoarseness has very materially diminished and the laryngeal examination showed that the nodules on the vocal cords have diminished very much in size and have become smoother and flatter. Although the patient is still somewhat hoarse, her improvement is so marked that she imagines she is perfectly well. Bone tuberculosis entirely cured and so admitted by physicians who treated her at Mt. Sinai formerly. The results in this case have been very remarkable. Patient has now left New York and is working as waitress in a Massachusetts summer hotel.

Case 7: M. E., female, age 45, widow, dressmaker. Family history negative, but a nephew who died in January from tuberculosis, after going out to Arizona, had lived with her for some time. Last winter caught a cold which persisted and has become worse on the return of cold weather. Appetite very poor; runs a daily temperature of 99.4. Her chief complaint is loss of weight and marked dyspnea.

Treatment was begun October 31st. The first month the weight increased two pounds and then remained stationary. Treatment was discontinued on February 18th. Between then and March 1st she lost four pounds, going back to 113 pounds. Daily injections were then resumed, and by April 1st she had again gained three pounds. She feels stronger and better, and dyspnea has disappeared. Her only complaint is that she still has little appetite.

This patient and two others were the only ones who complained of certain unfavorable symptoms in connection with the treatment, that is, that they could taste or smell something unpleasant in their breath after the injection, which one described as camphor, one as iodoform, and the other sometimes described it as camphor and sometimes as iodoform.

Case 8: L. I., female, age 37, married, French nativity. Father died of cancer of the jaw three years ago. About six years ago the patient had pleurisy and has had slight cough at intervals ever since. Sputum has never been entirely free from tubercle bacilli during all this time, although the pa-

tient has not suffered severely except at intervals. After recovering from the severe attack six years ago patient remained comparatively well until pregnancy occurred three years ago and with it marked symptoms of lung involvement. After her baby was born she improved and has continued comparatively well until the last two or three months, when she began to cough severely and lost considerably in weight.

Crepitant rales under the right breast; coughing increased their loudness but not their number. Bronchovesicular breathing. Treatment with Dioradin was begun on November 14th and continued daily until December 15th, during which time she gained two pounds and the cough practically disappeared. Treatment was discontinued for six weeks owing to the fact that her child developed scarlet fever and she had to stay at home to nurse it. February 1st treatment was resumed, it being given on alternate days, but was again discontinued February 27th when her second child became ill with scarlet fever. She is now nursing this child, does not cough, and feels quite well.

Case 9: J. L., male, age 48, married, salesman, Russian. Family history negative; father died of cholera at 66, and mother is still alive at 90. Three years ago the patient had right kidney removed, which was found to be tubercular; a fistula still remains. Had stomach trouble and the stomach was opened, but the findings were negative. He says the operation exhausted his strength.

At present he suffers from tubercular laryngitis, infiltrations and erosions. He coughs little, expectorates little (expectoration thick and purulent), is hoarse, finds respiration difficult at times; dyspnea from laryngeal infiltration. Digestion and appetite good; pain in swallowing.

At first epiglottitis was so infiltrated that the interior of larynx and vocal cords could not be seen. Treatment with Dioradin soon reduced the infiltration sufficiently to allow the vocal cords to be seen. The hoarseness disappeared rapidly and by the tenth injection he felt so much better and was so much improved that it was with difficulty that he was persuaded to continue. After eighteen injections he was lost from observation as he was anxious to attend to his work.

Came under observation again on April 18th. Had seen him last on March 17th, at which time he had received eighteen injections. Epiglottitis is again very much eroded. Left arytenoid region particularly infiltrated. Injections were recommenced, and by April 24th the epiglottitis was much improved. No pain and no annoyance from larynx at all now. Voice is much better.

After April 24th he was again unfortunately lost from observation.

Case 10: M. W., male, age 23, stenographer. Family history negative. Had pleurisy September, 1910, which was followed by loss of weight and tubercular involvement of the entire right lung. Patient lost twenty pounds, going down from 140, which had always been his normal weight, to 120. During October, 1910, he was at Sullivan County and came back feeling improved; gained ten pounds.

Both lungs, apex to base, dullness, crepitant rales and bronchovesicular breathing. Sputum contains tubercle bacille. Dioradin was begun in January and continued until the present time. His weight is now 140 pounds; there are still slight rales on the right side. Two independent examinations of the sputum, one by the Board of Health and one by the Practitioner's Laboratory, have failed to find tubercle bacille. Patient is still under treatment.

Case 11: J. K. C., female, age 28, single, laundress, Irish. Family history negative; father died at 85 of diabetes, mother and brother and sisters living and well. Patient had laryngitis four years; was treated by inhalation and drugs. Present condition very poor. Has no appetite; much emaciated. Right lung consolidated from apex to base; large cavity in upper lobe. Pulse 120, evening temperature 104. Tubercle bacilli present in great quantities.

Injections with Dioradin were begun on October 10th, and by November 17th she gained a pound and took nourishment with some relish. The improvement was but temporary, the patient dying on November 28th.

Case 12: H. G., male, aged 26, married, clerk. Family history negative. Has had a cough for years; has had general treatment directed to build up his system, but everything has failed to increase his strength, including country, mountains, etc. He is considerably emaciated, his digestion being poor and appetite variable.

Examination revealed a deep-seated bronchial affection; broken down suppurating gland. Over both lungs, anterior and posterior, loud sibilant rales. Mucous membrane of larynx and trachea considerably reddened. Tuberculin test positive.

Under Dioradin from February 8th to March 1st gained two pounds. His catarrh has greatly improved; from using six or more handkerchiefs a day, hardly uses one now. At first, site of injections pained him very much and even interfered with his sleep, and therefore we changed from upper to interscapular space. A gland in the neck that had started to swell after the suppurating one was incised and cleaned out, has disappeared entirely. The patient is still under treatment, but is much better. Rales less distinct, larynx and trachea almost normal. Tubercle bacilli, which were present in moderate quantities at the beginning of treatment, have now practically disappeared.

Case 13: A. H., female, age 22, single, nursing in institution, Irish. Family history negative. Patient has been sick since she came to America five years ago; lungs have been affected two years. At one time she improved sufficiently to leave hospital, but came back three months ago. She has lost thirteen pounds, has cough, poor digestion. Temperature 100, pulse 84. Tuberculin test positive. Left apex considerably involved; right slightly.

Received daily injections of Dioradin from February 13th to March 31st; gained three pounds. General condition improved so much that she is anxious to leave hospital and seek work. According to Dr. McKenzie, the House Physician, this patient's lungs have im-

proved materially; both lungs had been involved, but now only a few rales are heard in one apex.

Case 14: S. B., female, age 58, widow, housework. Father died of pneumonia, mother died at 40 of complications resulting from the menopause. Brothers and sisters died young. For the last three years patient has had bronchitis; has had grippe twice. Has been in hospital for two years.

Suffers from cervical adenitis; tuberculosis present in both lungs. Considerable cough, and expectoration of a frothy character. Her digestion and appetite are poor; no hemoptysis, marked dyspnea. Considerable loss of flesh; patient now weighs seventy-one pounds. Temperature 99.3-5, pulse 100.

Cough brought out crepitant rales over more than half of the left lung; left lung consolidated from apex to base with cavity in lower lobe. Daily treatment with Dioradin from February 11th to February 24th, when the patient refused further injections, as the improvement was not marked enough to satisfy her. Was dissuaded from continuing treatment by the other inmates of the ward upon whom the various injection treatments had been unsuccessfully tried.

Case 15: E. B., female, age 39, married, housework. Roumanian. Father 82, mother 65, both alive. Four brothers and two sisters well. Has never been sick until four months ago; illness began with hoarseness. Her throat was steamed, and her family doctor gave her medicine to stop her cough.

Her present condition is extremely bad; lungs and larynx are in an advanced stage of infection. Hasn't been able to swallow for some time and is almost asphyxiated from intralaryngeal swelling. Loss in weight due to inability to take sufficient nourishment. Menstruation has ceased. Has very marked dyspnea.

Ordinary treatment was without results, and Dioradin was begun February 13th, and by March the lungs had improved considerably, the swelling was almost gone, the patient swallowed with comparative ease. We were unable to continue treatment as patient left the hospital.

Case 16: L. S., male, age 29, married, diamond setter. Father died of pneumonia at 38, mother living. Had a bad cold four years ago and went to the Adirondacks, coming back much improved. Has had occasional hemoptysis. Dyspnea very marked. Is slightly hoarse and suffers from night sweats. Patient is a small, thin, highly nervous individual and weighs only 106 pounds. Has chilly feeling afternoons and evenings, vomits occasionally, regards food with aversion. Greater part of both lungs consolidated. Sputum loaded with tubercle bacilli. Recent treatment has been of no avail.

Treatment with Dioradin was begun February 28th; on March 24th he weighed 100 pounds. The profuse night sweats stopped after the first week; his breathing is very free; has now only slight cough on arising. Appetite good, and feels much better. Sputum still shows tubercle bacilli. Still under treatment.

Case 17: M. S., female, age 35, married, engaged in housework, German.

Family history negative. Has had bronchitis every spring for three years. Guaiacol Carbonate usually controlled the cough.

An examination revealed a deep-seated bronchial affection. Coughed often and the sputum was stained with blood. Was easily tired and had no ambition. Digestion was fair, but she lacked appetite. Complained of pain between the shoulder blades.

On March 14th was put under Dioradin. Repeated injections have failed to diminish the temperature, which still remains $99\frac{1}{2}$, but the general condition of the patient has improved. Cough has decreased, expectoration is now hardly yellow, blood has disappeared from sputum. The pains between the scapulae have diminished greatly. Patient has been much stimulated by the injections, has an increased desire for food, and looks hopefully forward to her discharge.

Case 18: G. Q., male, age 48, single, laborer, Irish. Has always been subject to colds and grippé. Has been sick four years; bed-ridden twenty months. Profuse night sweats, no hemoptysis, marked dyspnea, very hoarse, fair appetite and digestion. Marked loss of flesh, strength gone. Temperature 100, pulse 84. Pain in right apex. Apex to nipple, expiration prolonged, dullness, crepitant rales. Cracked-pot resonance heard under second rib.

Injections were commenced on October 10th, but no progress can be noted. Up to the present the case has remained stationary.

Case 19: M. R., female, age 50, single, cook, German. Family history negative. Well up to one and a half years ago, but after an acute gastritis patient contracted severe cold. Has had no previous treatment.

General condition very poor, emaciated, strength gone. Losing in weight. Raises over four ounces of sputum daily. Severe pain in left breast. Crepitant rales on coughing, especially in the middle part of the left lung posteriorly. Had two exhausting hemorrhages.

On October 18th Dioradin treatment was commenced, but with no apparent results, and was discontinued. Was later resumed, but patient grew worse and died shortly after a hemorrhage.

Case 20: A. G., female, age 17, single, servant, Polish. An older brother had tuberculosis. Patient had grippé two years ago, and has had a cough ever since. Coughs a great deal, sputum profuse. Has had an attack of hemoptysis, runs a daily temperature of 101. Von Pirquet test positive. Patient so weak that she takes only liquid nourishment. Coughing and raising interfere with sleep. Bronchial breathing, rather loud friction sounds, slight cavity, no fluid, dense fibrosis.

Treatment with Dioradin was begun on October 16th and continued seven weeks until December 4th. This was a uniformly favorable case; the patient gained strength at once, temperature gradually subsided and stayed normal after the fourth week. In the first two weeks weight increased five pounds. Afterwards she lost two pounds again. From this time on she steadily gained and on December 4th the treatment was discontinued, patient leaving hospital.

She then weighed 150 pounds, a gain of eleven pounds. She is much better, and her cough has practically disappeared.

Case 21: L. H., single, piano worker, age 27. Family history; four brothers and sisters well. Father and mother both died of tuberculosis, father at 56 and mother at 45. Always well, until three months ago. Had a severe attack of grippé, followed by bronchitis. Cough persisted, with constant fever and night sweats. Had two severe attacks of hemorrhage, the last one a week ago, losing a cup of blood. Lost seventeen pounds in the last two months. Now weighs 131 pounds. Von Pirquet test positive. Sputum shows very many tubercle bacilli. Injections of Dioradin were begun on March 18th and given daily. On April 4th weight 135 pounds. Cough somewhat better, but still severe. Rales over right lung considerably diminished. Slight hemoptysis that day. May 7th, weight 139 pounds. Cough almost entirely gone. Sweats have disappeared. No further hemorrhage or fever. Feels and looks better and stronger. Treatment continued on alternate days.

The above cases are reported as briefly as possible, several details having been omitted. We believe that everything essential concerning the cases has been included and the results achieved indicate the value of the treatment. It must be remembered that the remedy was not used on favorable cases, but in cases of long standing; often on patients who had remained unimproved for several years under the best known methods of treatment.

We have at present a large number of patients under treatment and as it is our intention to report the results more fully at a later date, we do not wish at present to commit ourselves definitely, but the unmistakably good results already obtained are, we consider, sufficient reason for the present preliminary report.

We wish to state that except temporarily, for the amelioration of some severe acute symptoms, no other medicinal agent was used in any of these cases while the Dioradin injections were being given. We adopted this plan, in order that any credit or blame for improvement or lack of improvement in any given case, might in justice be attributed to the remedy used.

SOUTHERN CALIFORNIA PRACTITIONER

A MEDICAL, CLIMATOLOGICAL AND SOCIOLOGICAL MONTHLY MAGAZINE.

This journal endeavors to mirror the progress of the profession of California and Arizona.

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EDITORIAL

CURBING AN EPIDEMIC.

Los Angeles has just passed through an epidemic of infantile paralysis and incidentally has shown the world an excellent example in bringing the epidemic rapidly under control. The presence of the disease was first reported to the Department of Health upon June 10, and reports of additional cases rapidly followed.

Cases reported, by weeks:		
Week ended—	Cases	Deaths
June 15.....	1	1
22.....	7	1
29.....	11	2
July 6.....	34	6
13.....	25	5
20.....	29	3
27.....	41	8
August 3.....	29	6
10.....	27	9
17.....	21	2
24.....	11	2

To August 27 inclusive, 2 cases.

Cases in quarantine, by weeks:		
Week ended—	Cases	
June 15.....	1	
22.....	7	
29.....	15	
July 6.....	36	
13.....	48	
20.....	104	
27.....	90	
August 3.....	93	
10.....	93	
17.....	77	
24.....	56	

To August 27 inclusive, 7 cases.

Strict quarantine established August 6, 1912.

Record by ages to August 17, 1912:

	Cases	Deaths
Under 1 year.....	21	6
1-2 years.....	47	7
2-3 years.....	46	6
3-4 years.....	26	4
4-5 years.....	20	8
5-10 years.....	32	7
10-15 years.....	13	4
15-20 years.....	5	1
20-25 years.....	1	0
25-30 years.....	1	0
30-35 years.....	1	0
35-40 years.....	1	0
40-45 years.....	1	0
45-50 years.....	1	0

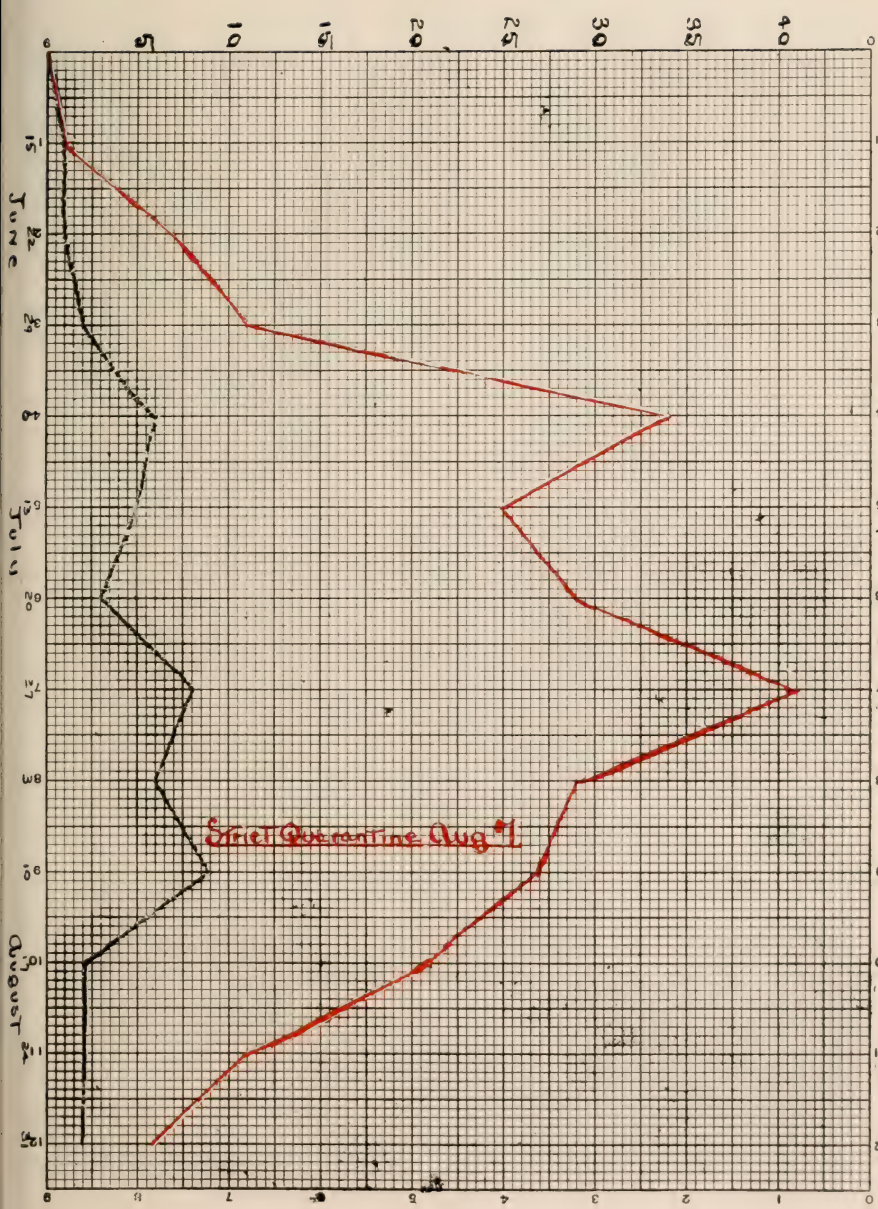
Age not recorded in 9 cases.

Record by sex: Cases, 122 males, 99 females; not recorded, 4. Deaths, 28 males, 15 females.

Municipal Hospital opened August 12, 1912, and four cases received up to August 17. (Seven cases to August 30, 1912; one case discharged; two deaths.)

The Commissioner of Health was empowered to employ eight emergency physicians and ten guards to help in controlling this epidemic. The chart shows well the remarkable success that attended the efforts of this limited force. The city council then decided that if quarantine was needed it ought to be as ideal as possible, and instructed the Department of Health to place a guard at every infected house. This was later

Infantile Paralysis
 Cases Reported by weeks
 Deaths Reported by weeks





PRECINCT MAP

OF

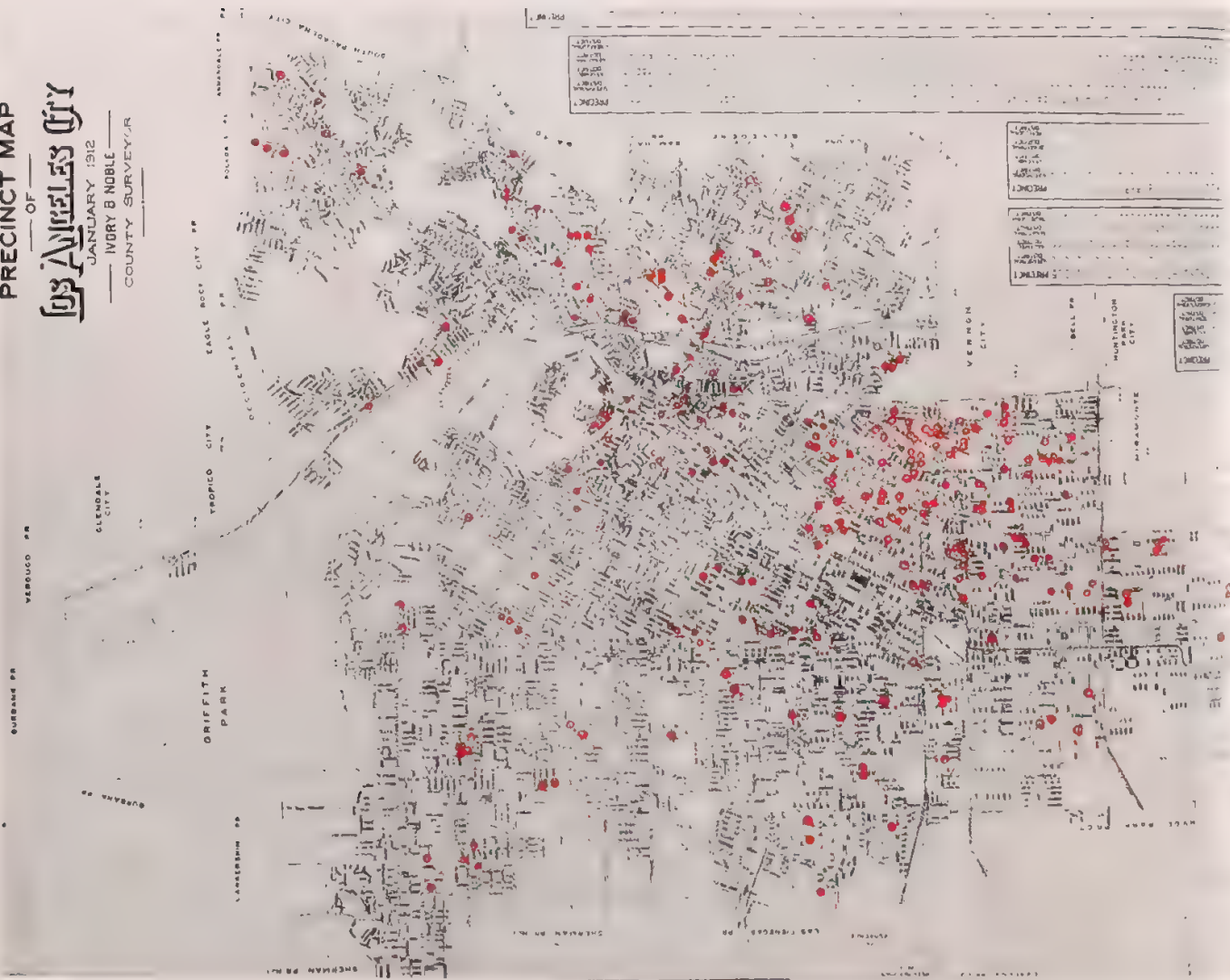
LOS ANGELES CITY

JANUARY 1912

IVORY B. NOBLE

COUNTY SURVEYOR

Red Dots Indicate Location of Cases of Infantile Paralysis.





changed to the employment of guards both day and night. The effect of this isolation is well shown in the accompanying chart.

The control of the epidemic was accomplished partly through the segregation of the sick and partly through the education of the public, largely by the dissemination of literature regarding the nature and methods of prevention of the disease.

Los Angeles ought to be proud of the work of her Health Commissioner. But is she? The work of the health office has been hampered by the attacks of some newspapers controlled by Mr. Earle, a man of some local renown because of his christian science tendencies. Some of the attacks upon the excellent work of the Department of Health are remarkably ludicrous. Thus the alleged secretary of the league of so called medical freedom, delivering an address on "Sanitation" before the Civic League, unburdened himself of the following, which almost shows a glimmer of common sense: "When alleged contagious disease breaks out the afflicted persons must be rigidly quarantined that the health of the community may be conserved, and no rational person will object to the strict enforcement of such laws."

During the week ending August 19th we were congratulating the Health Department upon its good work, since the number of cases in quarantine had been reduced from 104 at the beginning of the week to 78 at its close. Monday morning they were greeted by a tirade of abuse through one of the papers controlled by Mr. Earle, above referred to. The City Council, while of an investigative mind, was addressed by a State Senator, and a high official of a moving picture concern. These eminent authorities assured the council that their diagnosis was not infantile paralysis in the cases they had seen, and that there were few, if any, cases of infantile paralysis in the city. Against this array of

talent the medical profession was hopelessly lost. Who would doubt the wisdom and truthfulness of a State Senator or the President of a moving picture company, especially regarding the nature of such an epidemic. Incidentally we may add that the Earle publication diffused the wisdom of some people that claim to be physicians, but not one of whom we are able to verify as of repute in his profession. This puny attempt to deny the existence of infantile paralysis in Los Angeles is entirely unworthy of the region. Undoubtedly the presence of an epidemic of this nature will retard temporarily some visitors to the sunny southland of the Pacific Coast, but it will not have any lasting effect on the growth of Los Angeles nor upon its reputation as the great health resort of America. In fact the people throughout the United States will respect and honor Los Angeles all the more because of the honest attitude taken by the city council, which has gone about in a business like way to curb this epidemic and stamp out the disease. That its efforts have been successful is shown by the fact that in less than a month the number of cases in quarantine was reduced one-half and but few new cases are now appearing. The present Health Officer gained international reputation a few years ago when he limited the appearance of bubonic plague to the occurrence of a single case—a feat that has not been equaled before nor since. It is a great mistake to urge that the reputation of Los Angeles may be conserved by false statements or misrepresentations regarding the presence of infantile paralysis. It is better to hold to the truth and thus maintain the respect and confidence of the whole country. Los Angeles may now and then be forced to face epidemics of various kinds, though it has been singularly free of them in the past. However, she has shown to the world that she proposes to overcome them rather than to be overcome by them. The city fathers will use every means in

their power to maintain the prestige of Los Angeles as a city of health. Incidentally it may be noted that sickness and death are more rare among the children of Los Angeles than any other city, notwithstanding the prevalence of this epidemic.

Norway and Sweden were visited by an epidemic of about 1500 cases in 1905. The disease first appeared epidemic in New York and vicinity in 1907, when there was about 2500 cases. The disease was epidemic in Melbourne in 1903, and in St. Paul, Minn., in 1909. Massachusetts had 136 cases in 1908 and 923 in 1909. In no other city has the prevalence of infantile paralysis kept visitors away and it is inconceivable that Los Angeles should suffer in that regard. The present epidemic is now under control and there will probably be no further infection of new cases. There will be some reported, no doubt, that were infected before the health Department got control of the situation, but there will be practically no new infections.

POLIOMYELITIS NOTES.

F. F. Batten (Brain, v.xxxiv, No. 1) adds his endorsement to the term poli-encephalomyelitis, a term that strikes us as almost as good as pharyngopolioencephalomyelitis. After looking at these, poliomyelitis seems a reasonably short name for the disease commonly known as epidemic infantile paralysis. Batten gives a resume of the history of past epidemics, especially the epidemics in Great Britain in 1908, 1909 and 1910. That poliomyelitis can be, and is, transmitted from patient to patient has been made evident in all the recent epidemics investigated. Fortunately, the infectivity of the disease is not great, so that the isolation of the infected should diminish the incidence of the affection in the community and thus prevent the effects which are so disastrous to the usefulness and happiness of many lives.

F. W. Peabody, G. Draper and A. R. Dochez, in the "Monographs of the Rockefeller Institute for Medical Research," propose the following simple classification into three groups of cases: 1, abortive cases in which paralysis does not occur; 2, the cerebral group, including the rare cases with involvement of the upper motor neurons with a resulting spastic paralysis; and 3, the bulbo-spinal group, including the majority of cases, with lesion in the lower motor neuron and resulting flaccid paralysis.

Paralysis is a prominent feature of epidemic poliomyelitis, but is not always present. The proportion of these so-called abortive cases, characterized by the absence of paralysis, has been variously given by various observers. Wickman believes the abortive cases represent from 25 to 56 per cent of the total number of cases, and Muller asserts that the number of unparalyzed cases actually outnumbers the paralyzed ones. Much depends upon the ability of the observer to recognize the abortive cases.

The rapid increase of poliomyelitis in the United States up to 1910 has attracted considerable attention. This is well shown by the following figures: From 1881 to 1900 there were reported in the United States, 200 cases; 1900 to 1904, 100; 1905 to 1909, 5,400; 1910, 9,000.

In Europe there has at no time been an epidemic of this disease in which there were reported more than 2,000 cases in one year.

Compared with other infections, Hill, from the observation of the disease in the State of Minnesota, gives the following percentages of infections compared with the number exposed:

Scarlet fever, 22; diphtheria, 17; infantile paralysis, 6.

Where one case existed in a family, other cases were found in the same family, as indicated by the following percentages:

Scarlet fever, 40; typhoid fever, 30; diphtheria, 29; poliomyelitis, 17.

Eugene H. Porter, the New York State commissioner of health, reported August 6th that there were up to August 3, 1912, eighty-six cases of poliomyelitis with six deaths reported in Buffalo.

Hellstrom, in the *Prager medizinische Wochenschrift* for April 25, 1912, describes the prophylaxis of acute poliomyelitis observed in Sweden. When a case occurs in a school, the school is closed for fourteen days, and the room, books and clothing of the children are disinfected. Infected families are quarantined for fourteen days, and when a case occurs in a tenement house, the whole house is placed under quarantine. When the infection invades the homes of employees of the postoffice or railroads, they are ordered to stay away from duty. Children from infected districts are kept under observation. We would criticise the length of quarantine given here as too short, which may possibly be a factor in the repetition of widespread epidemic in Sweden.

P. McIlhenny, of New Orleans, writing in the *Boston Medical and Surgical Journal* under date of July 18, 1912, describes a plan of hyperemic treatment of acute anterior poliomyelitis, that he has used in five cases since June, 1906. The method consists, essentially, of the application of cups intermittently to both sides of the spine and directly over the posterior processes from the sacrum to the cervical region, for one hour daily until the soreness in the muscles disappears and voluntary motion begins to return, and then both massage and cupping are used until the muscles have regained their tone. The muscular soreness usually disappears about the fourth day and there is some voluntary motion about the tenth to twelfth day. We believe the number of cases in this report is far too small to justify generalizations.

PARALYSIS IN TEETHING CHILDREN.

By Geo. Colmer.

Whilst on a visit to the parish of West Feliciana, La., in the fall of 1841, my attention was called to a child about a year old, then slowly recovering from an attack of hemiplegia. The parents (who were people of intelligence and unquestionable veracity), told me that eight or ten other cases of either hemiplegia or paraplegia, had occurred during the preceding three or four months within a few miles of their residence, all of which had either completely recovered or were decidedly improved. The little sufferers were invariably under two years of age, and the cause seemed to be the same in all—namely, teething. (*Amer. J. Amer. Sc.*, 1843, V. 248).

JENNER, LISTER, PASTEUR AND KOCH.

With the idea of encouraging the study of Medical History, and at the same time testing the applicants for licenses in California on their knowledge of the development of Hygiene, at the April examination held by the State Board of Medical Examiners in San Francisco, we asked the following question:

“Name four men whose discoveries during the eighteenth and nineteenth centuries did the most toward the protection of the health of mankind.”

We had in our own mind the names of Edward Jenner, Joseph Lister, Louis Pasteur and Robert Koch.

Out of one hundred applicants, only four named these four, and there were only eleven who named Jenner, and one of these spelled it Gener; Lister was mentioned by twelve, while Koch was named by every one, and Pasteur by all but three; Ehrlich was named by twenty-two, and Metchnikoff by seven. Klebs, Kitasato, Reed, Pettenkoffer, Behring, Roux, Laveran were each mentioned by two; Gorgas, Wasserman, Virchow, Donald Ross, Edison, and a long list of others were mentioned once. Loeffler was

mentioned by six; Hanson, on account of his description of the Leprosy Bacillus was mentioned by one, and Neisser for his discovery of the Spirochaete of Syphilis, was thought by one to deserve a place as one of the four. Welch, Flexner, Weeks, Grasse, Celli, Shigo, and Eberth also each had one vote, while Morton received three votes.

At the August Examination there were two hundred applicants, and we thought to carry the same question a little farther and asked:

"For what great achievement toward the preservation of human life are each of the following men noted: Edward Jenner, Joseph Lister, Louis Pasteur and Robert Koch?"

The answers to this question were generally satisfactory, although, two of the applicants said that Lister's great achievement towards the preservation of human life was the discovery of Listerine, while another credited Lister with the discovery of Chloroform; still another said Lister was the discoverer of Anesthesia. Lister seemed to catch it all along the line, as another applicant accused him of discovering the use of Antitoxin. Several applicants said Jenner discovered smallpox, others, confusing him with the other Jenner, said that he was noted for his work on Bacteriology, and still others credited him with having discovered the Jenner Stain. Another, while acknowledging that Edward Jenner had the credit of having discovered vaccination for the prevention of smallpox, said that Lady Montagu was really the discoverer. This answer is interesting, as it shows that Lady Montagu is still remembered. This talented woman was the wife of the English Ambassador to Constantinople in 1717. She became very much impressed with the practice of inoculation and wrote to a friend in England as follows:

"The smallpox, so fatal, and so general among us, is here entirely harmless by the invention of ingrafting, which is the term they give it. There is a set of

old women who make it their business to perform the operation every autumn, in the month of September, when the great heat is abated. People send to one another to know if any of their party has a mind to have the small pox; they make parties for this purpose, and when they are met (commonly fifteen or sixteen together), the old woman comes with a nutshellful of the matter of the best sort of small pox, and asks what veins you please to have opened. She immediately rips open that you offer her with a large needle (which gives you no more pain than a common scratch), and puts into the vein as much venom as can lie upon the head of her needle, and afterward binds up the little wound with a hollow bit of shell. * * *

The children or young patients play together all the rest of the day, and are in perfect health till the eighth day. Then the fever begins to seize them, and they keep their beds two days, very seldom three. They have rarely above twenty or thirty pocks in their face, which never mark; and in eight days' time they are as well as before their illness. Where they are wounded there remain running sores during the distemper, which I don't doubt is a great relief to it. Every year thousands undergo this operation, and the French Ambassador says pleasantly that they take the smallpox here by way of diversion, as they take the waters in other countries. There is no example of anyone who has died in it; and you may believe that I am very well satisfied of the safety of the experiment, since I intend to try it on my dear little son.

"I am patriot enough to take pains to bring this useful invention into fashion in England."

She did introduce Inoculation into England, and although opposed by the leading members of the medical profession, the practice became well estab-

*Lady Mary Wortley Montagu and Times. By George Paston. Methuen & Co., London, 1907.

lished, and the writer who was a member of the Royal Society at that time says:

"It is demonstrated in the above-mentioned Treatise from a forty years' examination of the Bills of Mortality, that the smallpox carries off at least one in every nine of all whom it siezes in the natural way; whereas not one in fifty (scarce one in many hundreds) of those who receive it by inoculation have been found to die of it."

The death rate from inoculation was finally reduced to 1 in 662 and the practice was thoroughly established with the profession by 1798 when Dr. Jenner announced his discovery of vaccination.

W. L.

EDWARD JENNER, M.D.

A few days ago we were reading that delightful book "Reminiscences of A Literary Life," published in London, 1836, while the author, Thomas Frognall Dibdin, who is noted and loved as a bibliographer, and highly esteemed as a clergyman, was still in the height of his enjoyment of a long and useful life, when we came across the following in regard to Dr. Edward Jenner on page 199:

"About this time I became acquainted with the celebrated Dr. Jenner, a character and a name which England will do well always to cherish among those of her most illustrious sons of science. What a fight had he to encounter for the establishment of his beloved VACCINATION! What quackery, what prejudice, what malice and ignorance, were opposed to him! He lived in the end to triumph over his foes, and to acknowledge the remuneration of a grateful country. It is true that Russia led the way; and the diamond ring of Catherine was perhaps equal, as being an earlier demonstration of feeling, to the £20,000 of the treasury of Great Britain. I never knew a man of a simpler mind or of a warmer heart, than Dr. Jenner. I never knew a man who, being in the road, as

he was, to incalculable wealth, despised it all for the benefit of his fellow-creatures; and having seen his system established to his satisfaction, retired to his native village—to the enjoyment of his garden, his roses and honeysuckles, the hum of the evening beetle, the echoing note of the cuckoo, his flute and his cigar.

In pecuniary value, the present of the empress was doubtless far below that of the British exchequer; but Dr. Jenner was perhaps yet prouder of it as a trophy, or mark of respect, from a great foreign power. Its real pecuniary value was about £1500. It consisted of a cluster of brilliants, with a very large one in the center; the whole set in an oblong, and, to an English taste, old-fashioned way. We could never prevail upon its owner to wear it, except upon the birthday of one of his children. No man hated pomp and display more thoroughly than himself. His correspondence was latterly immense; and when, by the help of a secretary or a friend, he had got through his answers, and returned from paying his professional visits, so as to have the latter part of the day to himself, he would, when in the country, take his flute into the garden, play a number of simple tunes (of which "The Blue Bells of Scotland" was a particular favorite), saunter backwards and forwards, notice the flight of the bat and the owl; seeming to be absorbed in a sort of delightful reverie.

Dr. Jenner was a profound naturalist; in whatever department he looked into, he looked into it earnestly and continuously. He had been the favorite pupil of the great John Hunter, who had taught him to consider all creation as one vast chain, of which every link had some particular cause in itself of sympathy or affinity. Hunter kept eagles; loving to look at them, to watch their motions, and to mark their characters. Hence, as Jenner himself once told me, the pupil caught his passion for ornith-

ology; and that pupil's first essay in the ornithological department being "Observations on the Natural History of the Cuckoo," published in the Royal Society's Transactions for 1788, obtained him an instant and decided reputation throughout Europe. Buffon might have envied him such a distinction. In the year 1798 appeared his first treatise on the Cow-pox."

W. L.

FIRST ANNUAL BANQUET OF THE LOS ANGELES MEDICAL ASSO- CIATION.

More than two hundred and fifty members of the Los Angeles County Medical Association gathered at an informal banquet at the Union League Club, Tuesday evening, September 12, 1912. The avowed purpose of the gathering was to establish union and promote harmony, that the year's work may bare fruit socially as well as intellectually. The menu card was in the form of a prescription. It was a prescription that seemed to meet approval of all present. Then came the feast of reason. Dr. W. W. Beckett, president of the evening, introduced the Toastmaster, Dr. Walter Lindley. The Toastmaster bespoke the good will of the profession for the Southern California Practitioner, which he declared is invaluable to the profession of this region and deserving of their support and practical indorsement. Eulogy of the excellent work of the Health Officer, Dr. Powers, called forth prolonged applause. The balance of the evening till the mid of night was taken up with the following addresses: 1. Dr. Andrew Stewart Lobinger, "Medical Association of the Past;" 2. Dr. F. C. E. Mattison, "Medical Association of the Present;" 3. Dr. F. M. Pottenger, "Medical Association from the Business Standpoint;" 4. Hon. J. M. Elliott, Pres. First Nat'l Bank, "Medical Association from the Banker's Standpoint;" 5. Hon. Frank Tyrrell, "Medical Association from the Attorney's Standpoint;" 6. Dr. Philip

Jones, Sec. State Med. Assn., "Medical Association of the Future."

As we look back upon the addresses delivered at this first Annual Banquet, we are impressed most by the points made by the Honorable J. M. Elliott, President of the First National Bank. After declaring that a man might own an expensive residence and an excellent automobile and still be without assets that would justify a bank in making a loan, President Elliott stated that stock in a building such as the County Society will build, would be an asset upon which loans could be secured from the banks. As an investment it would probably net fully 8 per cent.

Don't you want some of that stock? So sorry but we haven't any for sale. But possibly you may still be able to secure some of it at par or a little above.

The Southern California Practitioner has faith in the construction of this building, which will be a strong factor in the warfare against quackery and the montebanks in and out of the medical profession in this region.

VERBAL SEX EXAMINATION.

Before the last election in Los Angeles, numerous reports were published and circulated, to the effect that undue liberties were taken in the examination of pupils in the public schools. One of the most striking of these was that a maiden had been subjected to a complete physical and sex examination against her will and that of her parents. So after the election there was a prolonged investigation by the Board of Education. In the instance just cited, the mother of the girl declared that her daughter had been given a complete physical and VERBAL sex examination. To this the parents had not consented, neither had they objected. Furthermore, the examination had been conducted by a lady physician, and the question regarding sexual matters had been asked to determine whether the girl was in condition to be examined for the gymnasium. One

of the recently elected members of the Board (Mr. Bean) declared that the whole matter never would have come up but for the fact that the Los Angeles Medical Association, before the election, had declared that certain of the new members (Blight, Craig and Bean) were not worthy of support in their candidacy for election as members of the Board of Education. We are impressed that this is a very flimsy excuse for the false charges which these three individuals signed, and it demonstrates that the local Medical Association was amply justified in claiming that the newly elected members of the Board of Education are unworthy the office to which they were elected. Alas, politics, what absurdities are committed in thy name!

The Editor feels a sense of personal loss through the death of Dr. George C. Armstrong, August 5, 1912, following an operation for appendicitis. The doctor graduated from the Northwestern University Medical College, 1899, and had

done postgraduate work in this country and abroad. He was formerly in practice at Cambridge, Nebraska. Dr. Armstrong had always been actuated by high ethical ideals. Though but recently of Los Angeles, he had taken an active part in contributing to the pages of this journal and in doing college work. Aged 42 years, he was taken away in the prime of life. Our sympathy is extended to his widow, who was his close companion.

We note, with sincere regret, the death of the eminent editor and founder of our contemporary, the Medical Council, Dr. John Jay Taylor, of Philadelphia. Dr. Taylor took an active part in legitimate medical matters, utilizing well the literary bent of one born in Indiana, a state noted for its literary geni. Cancer of the tongue of two years duration led to fatal exhaustion, the Doctor passing away at his summer home, in Ocean City, N. J., August 1st.

EDITORIAL NOTES

Dr. Thos. Watkins of Bisbee is away on a month's vacation.

Dr. W. R. Franklin has recently moved to Buckeye, Arizona.

Dr. and Mrs. C. Van Zwalenburg have returned to Riverside after a tour East.

Dr. and Mrs. J. M. Swetnam of Phoenix are spending their vacation along the California coast.

Dr. Roy E. Thomas of Phoenix, Ariz. is spending the summer at Terminal Island with his family.

Dr. C. H. Lashlee of Redlands and San Bernardino, has been appointed house physician of the Ramona Hospital.

Dr. George H. Kress is home from a trip east, with all he could carry of European medical erudition. Glad he is back and looking so well.

Dr. Wm. I. Simpson of Phoenix, was a visitor in Los Angeles during the month of July, working with Dr. Waddell in special work on the ear.

The first case of Malta fever ever reported in California is included in the monthly report sent to the State Board of Health by Dr. R. G. Broderick.

Dr. J. Walter Witten the assistant surgeon of the United Verde Hospital at Jerome, Ariz., returned to Virginia for a vacation about the middle of August.

Dr. H. K. Beauchamp, who resigned the Superintendency of the Arizona Insane Hospital to resume general practice, will return from New York City in September. The doctor has spent the summer in the New York Post-Graduate School.

Dr. Turning Burton Smith of Clifton, Arizona, took unto himself a wife, August 9. The bride was Miss Rebecca Lynch. Dr. and Mrs. Smith will go to San Francisco and from thence to Honolulu. They will be at home to their friends after September 15.

Sir Almroth Wright, M.D., the English physician, declares that woman's mind is always threatened with danger from the reverberations of her physiological emergencies, and declares that woman suffrage is a disease. We hope the medical profession will not be expected to stem this epidemic.

All three of the national representatives from Arizona have placed themselves squarely on record in favor of the Owens Bill, owing chiefly to the concerted demand made on them by the medical profession of the state backed up by a very strong public sentiment. They will not only vote for the bill but will endeavor to bring it to a successful issue.

Dr. Jno. E. Bacon, of Miami, Ariz., President of the Arizona Medical Association, spent the month of July in Los Angeles, during which period a son was born to him. Dr. Bacon is just beginning the construction of a thirty-five bed Hospital at Miami where he will employ two assistants. The mining field of the vicinity is one of the richest and most prosperous in Arizona.

Dr. E. S. Godfrey, Jr., recently appointed referee of the New York Mutual Life Insurance Company, for Arizona, has returned from a six weeks visit to New York and resumed his practice in Phoenix, and along with it, his work for this Company. Dr. Godfrey was retired from the office of State Superintendent of Health by the political changes which occurred when Arizona was admitted to statehood.

Dr. R. N. Looney, the State Superintendent of Health for Arizona was fortunate enough to secure a slight increase in the appropriation for his work in that state. Dr. Looney is prosecuting the

work of his department vigorously, recently making a tour of the entire Salt River Valley for the purpose of inspecting the dairies preliminary to instituting reforms which will tend to deliver better and purer milk to Phoenix and vicinity.

The United States Civil Service Commission announces that the examinations for trained nurse in the Isthmian Canal and the Indian services will be held on October 16, 1912, as scheduled, but that the announcement of the examination for this position in the Philippine service is canceled because of advice from the Bureau of Insular Affairs that future vacancies in this position in the Philippine service will likely be filled by Filipino women. Issued August 14, 1912.

The first examination of the Arizona Medical Examining Board recently appointed revealed the fact that they will maintain the high standards of the previous Board. While the vicissitudes incident to political changes in a new State caused the old Board to submit to a complete change, no favoritism was shown in the appointment of the new members and men of undoubted integrity make up the new Board and the same high standards so long maintained in Arizona will continue to be set by the new examiners. Dr. W. A. Holt of Globe is the President and Dr. Jno. Wix Thomas of Phoenix is Secretary. At the July examinations, there were eight applicants, of whom six passed and two failed.

The repairs upon the State Insane Hospital for Arizona, which was burned about a year ago, are nearly completed. The recently appointed Superintendent, Dr. A. C. Kingsley, formerly of Nogales, has made a number of changes in the interior plans of the institution for the purpose of providing better ventilated quarters for these patients. Dr. Kingsley is at present touring the large cities of the northwest for the purpose of visiting the asylums that he may secure

information for the betterment of conditions at the Arizona institution. Dr. Geo. W. Stephens is in charge during his absence. Dr. Stephens was formerly with Middle Mississippi Insane Hospital at Meridan, Miss., and he and Dr. Kingsley make an excellent staff for this institution.

NEW YORK AND NEW ENGLAND ASSOCIATION OF RAILWAY SURGEONS.

The twenty-second annual session of the New York and New England Association of Railway Surgeons will be held

at the Hotel Astor, New York City, on Wednesday, November 15, 1912. A very interesting and attractive program has been arranged. Dr. John B. Murphy of Chicago will deliver the "Address in Surgery." Railway surgeons, attorneys and officials and all members of the medical profession are cordially invited to attend.

DR. WALTER LATHROP,

President,

Hazleton, Pa.

DR. GEORGE CHAFFEE,

Corresponding Secretary,

338 47th St., Brooklyn, N. Y.

BOOK REVIEWS

THE HOME NURSE'S HANDBOOK OF PRACTICAL NURSING. A Manual for Use in Home Nursing Classes in Young Women's Christian Associations, in Schools for Girls and Young Women, and a working text-book for mothers, "practical" nurses, trained attendants, and all who have the responsibility of the home care of the sick. By Charlotte A. Aikens, Author of "Hospital Management," "Hospital Training School Methods," "Primary Studies for Nurses," "Clinical Studies for Nurses." 12 mo of 276 pages, illustrated. Philadelphia and London: W. B. Saunders Company. 1912. Cloth, \$1.50 net.

This little volume deals with home nursing as distinct from the more elaborate technic of hospital practice. By the most fundamental of all laws, women are the nurses of the world. Few, if any, women escape the responsibility of the care of some sick or helpless one. All women have the responsibility of the nursing of health in the home, or the prevention of disease. A lamentable fact to consider is that so many ailments, which are in the early stages apparently trifling, readily curable, result fatally because of ignorance and lack of proper home nursing. Thousands of children and youths and others in early middle life go to premature graves every year who need not have died had their mothers or wives

known the barest essentials of proper care of the sick.

The most ardent love, the most untiring efforts, nor the best of intentions, will not undo the results of ignorance. This volume is designed as a guide to the home girl or woman who seriously desires to fit herself to do the best for the health of her own family, and as a working textbook for the "practical" nurse or trained attendant who desires to be a useful helper to the physician in the home sick room. Special attention has been given to the care of babies and maternity nursing. Those who lead in advance movements for public welfare are more and more emphasizing the thought that since every girl naturally and instinctively looks toward motherhood, instruction in baby hygiene is her right, and no motives of prudery should longer deprive her of this instruction. An educational scheme which leaves young mothers to learn wholly by experiment and at the risk of the baby's life, how to care for the babies of the state, is not calculated to produce the best results to the child, the home, nor the nation.

DISEASES OF THE EYE. A Manual for students and practitioners. By J. Herbert Parsons, D.Sc., M.B., F.R.C.S., Ophthalmic Surgeon, University College Hospital; Surgeon, Royal London (Moorfields) Ophthalmic Hospital; Late Ophthalmic Surgeon, Hospital for Sick Children, Great Ormond Street. Second Edition. Philadelphia: P. Blakiston's Son & Co. Price \$4 net.

The text has been revised throughout in this edition and several new sections added. Some of the illustrations of the first edition have been transferred to plates, and some new illustrations have been introduced into the text.

Experiments upon animals have shown that the intraocular pressure follows passively every change in the general blood pressure. The manometer placed in communication with the anterior chamber, shows that the normal intraocular pressure is about 25 mm. of mercury.

The student is advised to procure a good ophthalmoscope at the outset of his clinical work in the medical wards. The cheaper forms are not only a waste of money, but are a perpetual source of annoyance. The modification of Couper's ophthalmoscope generally known as Morton's is most strongly recommended.

Two great classes of cases in which the tension is pathologically increased can be distinguished, viz., (1) those in which the tension is only moderately increased, in which the anterior chamber is deep, and in which there are more or less definite signs of inflammation of the ciliary body; and (2) those in which all grades of increased tension are met with, in which the anterior chamber is shallow, and in which, though there may be very evident signs of congestion and irritation, any definite signs of ciliary inflammation are either absent or secondary in onset. It is well to keep these two groups quite separate, since their pathogenesis is different and the differences in their clinical course and treatment are marked. The term glaucoma should be limited to the second group.

The inside of the back cover is very pleasantly decorated with Holmgren's wools for color blindness. It is an excellent work for the man in general practice, and is quite up-to-date.

PELLAGRA. History, distribution, diagnosis, prognosis, treatment, etiology. By Stewart R. Roberts, S.M., M.D., Associate Professor of the Principles and Practice of Medicine, Atlanta College of Physicians and Surgeons, Atlanta, Georgia; Physician to the Wesley Memorial Hospital; Formerly Professor of Biology in Emory College. With 89 special engravings and colored frontispiece. St. Louis: C. V. Mosby Company. 1912. Price \$2.50.

The history of pellagra in other countries for the past two centuries warrants the belief that the United States is facing a long period during which the disease will prevail and in which many thousand human beings will become its victims. Little children will yield themselves to its insinuating and mysterious grasp; strong men will become weak and no longer able to render service as citizens; its mark will be left on the offspring of pellagra mothers; and especially through the southern states its ravages and its memory will exist side by side in every rural community. It has already fastened itself on the spinal cord, and its poisons flow in the blood of probably as many as ten thousand human beings in the states today. The corn theory is a century old and unproved—the infection theory of Sambon is new and unproved.

Roberts is evidently well acquainted with pellagra as observed both in Europe and America, and he has written a work that is both interesting and a stimulus to further and more accurate observations, to the end that fewer cases will remain undetected.

AUGUSTUS CHARLES BERNAYS. A Memoir. By Thelka Bernays. St. Louis: C. V. Mosby Company. 1912. Price \$2.

This is a life story of Bernays, written by his sister. It forms an interest-

ing volume of 309 pages. The triumph of evolution, in which the thought of ages culminated, was the great event of his boyhood. This world-view, eagerly accepted by the foremost men of science, but confirmed his intuition of kinship with all living beings, and, suffusing his entire mentality, stimulated him to his significant researches in morphology. The crowning glory, however, of his short, full career, notwithstanding his skill, his pioneership, and his achievement in surgery, lies in his having not only grasped, but lived, the spiritual meaning of evolution—brotherliness.

The Bernays' tablets, composed of bichloride of mercury and citric acid, are in common use, as are also the Bernays' sponges. In the anesthetic controversy, Bernays was a supporter of chloroform as opposed to ether.

It is an interesting book, well worth the reading.

DISEASES OF THE GENITO-URINARY ORGANS AND THE KIDNEY.
By Robert H. Greene, M.D., Professor of Genito-Urinary Surgery at the Fordham University, New York; and Harlow Brooks, M.D., Assistant Professor of Clinical Medicine, University and Bellevue Medical College. Third revised edition. Octavo of 639 pages, 339 illustrations. Philadelphia and London: W. B. Saunders Company, 1912. Cloth, \$5 net; half morocco, \$6.50 net.

The authors state that no new material has been introduced in this edition merely because it is new, and in so far as possible, the newer methods and theories have been first investigated, either in their own clinics or in those of their immediate associates. The larger amount of space is devoted to the urinary organs proper, and relatively less to purely sexual disorders. As indicated, the work is the conjoint product of a surgeon and a physician, practically equal attention being paid to the medical and surgical aspects of these diseases.

The blood-pressure in acute renal diseases shows marked variations. In the

early stages of the disease there is commonly, and often a considerable, increase, but there may be a decrease, even to the subnormal, particularly when cardiac failure is imminent. In the nephritis accompanying the acute infections, experience has shown that the pressure is either normal or subnormal, and that if increased, it is but slightly so. In these conditions the determination of the blood-pressure is of little value excepting in so far as it may be used to differentiate between the acute exacerbation of a chronic nephritis and an acute nephritis; in the former condition the blood-pressure is constantly high, and in the latter it is usually but little altered, although occasional acute cases are seen in which the pressure is as high as in chronic cases.

In chronic or subacute nephritis, in which the parenchymatous portions of the kidney chiefly are involved, the pressure is, as a rule, high, although in the writers' experience it rarely exceeds 170 to 200 mm. Hg. In certain cases, however, especially when there is a loss of vascular tone, as in myocarditis or disease of the arterial media, the pressure may be below normal, reaching as low as 85 mm. Hg. (systolic pressure). In those forms of renal disease in which edema is present, it must be borne in mind that an edematous condition in the arm may materially alter the results of the determination, and in such cases no absolute reliance can be placed on the data secured by the sphygmomanometer.

The blood-pressure is constantly increased in that type of renal disease chiefly characterized by fibrous hyperplasia, and it is immaterial whether this occurs in the small granular, so-called "sclerotic" kidney, or in the large red organ; the latter, in the writers' opinion, very often precedes the sclerotic, and represents one of the early stages in the development of the small hard kidney. In these conditions

the blood-pressure is almost invariably increased, often reaching above 250 mm. of Hg. The writers deprecate the routine use of the vasodilators in the high pressure of renal disease.

The present edition well sustains the excellent standard maintained by the two previous editions of this admirable work.

LABORATORY METHODS. With especial reference to the needs of the General Practitioner. By B. G. R. Williams, M.D., Member of the Illinois State Medical Society, American Medical Association, etc., assisted by E. G. C. Williams, M.D., formerly Pathologist of the Northern Michigan Hospital for the Insane, Traverse City, Mich., with an introduction by Victor C. Vaughan, M.D., LL.D., Professor of Hygiene and Physiological Chemistry and Dean of the Department of Medicine and Surgery, University of Michigan, Ann Arbor, Mich. 204 pages with 43 engravings. St. Louis: C. V. Mosby Co., 1912.

An excellent small work of the practical sort, intended primarily for the student and country practitioner and those who "have not the opportunity to work in marble halls."

DIFFERENTIAL DIAGNOSIS, PRESENTED THROUGH AN ANALYSIS OF 385 CASES. By Richard C. Cabot, M.D., Assistant Professor of Clinical Medicine, Harvard University Medical School, Boston. Second edition, revised, profusely illustrated. W. B. Saunders Company, Philadelphia and London, 1912. Cloth, \$5.50 net.

The volume is an octavo of 764 pgs., with 195 cuts and illustrations. In the preface to this edition, the statement is made that some of the symptoms not treated in this volume (e. g., hematuria, edema, diarrhoea, dyspepsia, glandular enlargement, etc.) will be dealt with in a second volume along the same lines. In the present volume, the following twelve prominent symptoms are discussed: pain, headache, lumbar pain, general abdominal pain, epigastric pain, right hypochondriac pain, left hypochondriac pain, right iliac pain, left iliac pain, axillary pain, pain in the arms, pain in the legs and feet, fevers, chills, coma, convulsions, weakness, cough, vomiting, hematuria, dyspnea,

jaundice, and nervousness.

"Two traditional fallacies about headache: (a) The belief that physiologic and pathologic states of the **female generative organs** often produce headache is widespread. Textbooks, such as Butler's, list dysmenorrhea, "uterine disease," disease of the ovaries, and even of the bladder (!) as causes of headache. No proper justification for these ideas has yet been attempted, so far as I am aware. Headache is, of course, exceedingly common in menstruation, but so it is in eclampsia; yet no one to-day connects the eclamptic headache in any direct way with the condition of the uterus. Toxemia of the puerperium, toxemia on the menstrual period, is a much more plausible, though not a demonstrable, hypothesis.

(b) "Lithemia" and "rheumatism" are also frequently invoked to explain headache. Neither word is defined by those who use them in this connection. "Lithemia" means constipation and the indigestion of lazy, gluttonous people, conditions which certainly do produce headache.

"Rheumatic headaches" refer usually to the type associated with "stiff neck" and indurations in the bellies of muscles attached to the occiput or the temporal region.

"There seems, however, no sufficient reason for continuing the tradition which applies the word "rheumatism" to such lesions."

At the present time, this work has no peer in the field of differential diagnosis. The illustrative cases are first stated, then discussed, the outcome given, and lastly the diagnosis is given.

WANTED.—Physician to share fully equipped office and reception room, including office nurse, use of books and instruments, etc. Address, 234 Care of the Southern California Practitioner.

THERAPEUTICAL HINTS

THE ICE BAG IN APPENDICITIS.

In a most interesting article by A. M. Fauntleroy, Surgeon of the United States Navy, Medical Record, Aug. 3, 1912, the fact is brought out, basing the same upon a large number of cases of appendicitis operated, that the ice bag is positively harmful in this condition. In 50% of the cases operated, where the ice bag was used, the condition seemed to indicate that there was a noticeable lack of effort on the part of nature to wall off, from the rest of the abdominal cavity, the appendix, which was frequently very much congested, gangrenous or perforated. He also observed that in the ice bag cases there was a surprisingly low white cell count when one took into consideration the condition found in the abdomen at the time of the operation. From 8,000 to 11,000 white cells was the rule in these ice bag cases when one would be justified in saying that the pathological condition warranted a constitutional reaction of from 20,000 to 30,000 leucocytes, or even higher.

On the other hand, in those cases in which the hot water bag or morphine had been used prior to operation (the ice bag not being used at all), the white count corresponded to what one would expect. Dr. Fauntleroy advances from his findings the logic that while the ice bag causes numbness, practically the same as in the condition of frost-bitten ear or toe, it also decreases hyperemia, leucocytosis and stasis in the part to which it is applied. That heat is the direct antithesis of cold in encouraging favorable physiological action in inflammatory processes, whether superficial or peritoneal, seems to be from his report most logically and conclusively proven.

In applying heat whether it be for peritoneal or inflammatory conditions of a more superficial character, the most rational method is to use that which is not only sanitary, but, for the comfort of the patient does not require frequent

changes. In this respect, antiphlogistine, on account of its heat retentive properties, its cleanliness, and its ease of application, should appeal to the professional mind. That antiphlogistine has proven of great therapeutic value as a thermic agent is best indicated by its extensive professional employment and its many advantages over the hot water bottle and other methods of application of heat is readily discernible.

In order further to popularize the demand for BACTERINS (Bacterial Vaccines), and enable physicians to make more general use of these products, we call attention to the downward revision of prices on Mulford Bacterins, effective August 5th.

The Mulford Bacterins are in every case "polyvalent," which means that the bacteria contained in a Bacterin, although of the same species, are obtained from many different sources. For instance, Strepto-Bacterin is polyvalent, the bacteria used for its preparation are all streptococci and are isolated from different patients suffering with streptococcal infections among which may be mentioned puerperal sepsis, general septicemia, erysipelas, tonsillitis, empyema, cellulitis, etc.

A number of the Mulford Bacterins are "mixed" by which is meant that they contain the various bacterial species generally present in a mixed infection. For instance, the mixed Vaccine of chronic gonorrheal infections, besides the gonococcus contains various staphylococci, colon bacilli streptococci, and other organisms isolated from cases of chronic urethritis and prostatitis.

In some cases, diseases from their inception are due to mixed infections, while in many others the infection becomes a mixed one as the disease develops. Past experience and results have fully established the advantages claimed for these "polyvalent" and mixed Bacterins."

HIGH-POTENCY ANTITOXIN.

A noticeable preference for concentrated anti-diphtheric serum (globulin), as compared with the older or "regular" form of diphtheria antitoxin, has manifested itself among the medical fraternity. "High potency, small bulk," appears to be the order of the day. A good index to the tendency in this direction may be found in the offerings of the manufacturers, who, as a matter of course, are promptly responsive to each new demand of the profession. For confirmation of the belief that the concentrated product is now in the ascendancy, one has but to turn to the announcement of Parke, Davis & Co., in the current number of this journal, "Antitoxin That Justifies Your Confidence." Here one finds prominently featured the concentrated antidiphtheric serum (or globulin). It is interesting to note in this connection that a wider range of dosage than formerly is now offered—from 500 to 10,000 antitoxic units—the larger doses, of course, being provided for severe, late or other exceptional cases. And herein, at least, is one undisputed point in favor of the concentrated antitoxin: when a large dose is needed, it can be administered in this form without difficulty and with little danger of disturbance, owing to the comparative smallness of its bulk.

Some physicians, it may be noted, are under a misapprehension as to the nature of the concentrated antidiphtheric serum (globulin), assuming that it is widely different from the product which they have known for years as antidiphtheric serum. The idea is wholly erroneous. Concentrated antidiphtheric serum (globulin) is the regular product, precipitated and purified, from which most of the serum constituents have been eliminated except those bearing the antitoxin. It is in no sense inferior to the original serum—on the contrary, as previously noted, it possesses the advantage of lesser bulk.

The power to recuperate resident in the tissues, may be markedly augmented by Cord. Ext. Ol. Morrhuae Compound (Hagee), and with many physicians it is a routine practice to employ it for this purpose.

The usefulness of Cord. Ext. Ol. Morrhuae Comp. (Hagee) as a reconstructive lies in the nutritious elements contained, which when fed to impaired tissues build up and strengthen them. Each fluid ounce of the Cordial represents the extract obtainable from one-third fluid ounce of cod liver oil (the fatty portion being eliminated), 6 grains calcium hypophosphite, 3 grains sodium hypophosphite with glycerin and aromatics, it is free from grease and the taste of fish.

**SCIENTIFIC MANIPULATIVE
THERAPEUTICS.**

To the Medical Profession: The undersigned respectfully solicits cases needing such treatment assuring you of conscientious work with faithful conservation of *your* interest in the patient.

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The Nation might reduce its 1,500,000 annual deaths and 3,000,000 constant sick beds from one-fourth to one-half. This would mean an addition of at least 15 years to the length of the average life; it would mean an annual saving to the Nation of at least \$1,500,000,000—capitalizing the value of the economic product from those extra years. It would mean assured physical stamina for American posterity. It would mean that every day we would save as many lives as perished on the Titanic.*

*See National Vitality, Its Wastes and Conservation, by Prof. Irving Fisher, Bulletin No. 30 of the Committee of One Hundred on National Health, room 51, 105 East Twenty-second Street, New York City; also published as Senate Document 676.

CALIFORNIA HOSPITAL ALUMNAE NOTES

The regular monthly meeting of the California Hospital Alumnae Association was held Monday Aug. 26th at the Directory rooms. The president being absent, Miss Arnold presided. Mrs. Durbin was elected secretary pro tem. Eight nurses were elected to membership. After the business session the meeting was addressed by Mr. Thos. Kase, Rep. candidate for State senator from the 37th district. Refreshments were served by Miss Middleton. It was an unusually interesting day and the meeting well attended.

Our Society is in the deepest sorrow because of the very serious illness of Miss Louise Kent, our beloved president. Miss Kent has been an earnest and faithful worker in the Alumnae since its organization and she is greatly missed from her accustomed place. The love and sympathy of each member of the Society are hers.

Miss Hilda G. Humphries, Class '03, who went to Chicago in May as a delegate to the National Convention, has remained over in Boston during the summer where she has been taking a post graduate course on the "Boston Floating Hospital." The experience to be obtained there in the care of sick children cannot be excelled anywhere. She will return better qualified than ever to follow this, her favorite line of work.

Miss K. Anderson is spending a few weeks in Oregon.

The marriages among our members have been very numerous of late. Miss Hammett, class '11, was married to Mr. Edward Everett Jones in Santa Barbara, August 25th. They will go to Honolulu on their honeymoon; Miss Malone, class '10, was married to Mr. Ernest Kimmel; Miss Frances Parks, class '11, to Mr. Ray Bradley. They will live in San Bernardino; Mrs. Della Ensign, class '08, to Mr. Fred Mason, class '07.

Miss Frances Riley is visiting in Indiana for a couple of months.

Miss Boyer spent some time in Yosemite this summer.

Mrs. Van Dyke has gone to Oakland to follow her profession for a time.

Misses Carrie Johnson and Clyde Sharp have just returned from a six-weeks trip to San Francisco.

Mrs. E. P. Durbin spent three weeks in motoring around to different points of interest in Southern California with a party of friends.

The sympathy of the Alumnae is extended to Miss Lillian Simpson for the loss of her sister by drowning at Long Beach recently.

Miss Minnie Allen has just returned from Berkeley where she has been taking a course in the summer school.

Miss Ambrose is visiting in Honolulu.

Miss Arnold is much improved in health since her return from the mountains.

Miss Nelson is spending some time in Bakersfield.

Mrs. Spaulding, Miss Fenn and Miss Arnold entertained some of the members of the classes '07 and '08 at their home 1446 Wright Street recently in honor of Mr. and Mrs. Fred Mason.

WANTED—Assistantship to eye, ear, nose and throat specialist or position as Company Surgeon to some manufacturing or milling concern. Have had extensive experience in hospital work and private practice and am just returned from special work on eye, ear, nose and throat in Vienna and London. Can furnish credentials. Health is perfect. Have California license. Address, R. K. Hutchings, c/o University Club, Los Angeles.

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MISCELLANEOUS

To the Practitioners of Arizona:

The fact that the Council of the Arizona Medical Association has decided to expend the amount formerly devoted to the payment of subscriptions for the Practitioner for all members of this Association, is no reflection whatever upon the pleasant and harmonious relations which have existed between the Practitioner and the Association. It simply means that local conditions in Arizona are so urgent that a Journal published by our own Council was demanded, and we have not sufficient funds for both purposes.

We do not believe this change in the plans of the Council will materially affect the circulation of the Practitioner in Arizona since the interest of the Practitioner in, and its loyalty to, Arizona, and the physicians of our state have been so manifest, that, even if no other reasons existed, the doctors of Arizona should continue this association by individual subscription. However, no doctor has any need for such an excuse as courtesy for subscribing for the Practitioner, while its high character as a magazine is maintained and its influence in professional and public life is considered. Every Arizona doctor should receive the Practitioner.

W. Warner Watkins.

MEDICAL AND SURGICAL ARTICLES IN CHINA.

(From Consul General George E. Andersen, Hongkong.)

There have been great fluctuations in the trade in medical and surgical apparatus and instruments in China since such modern goods were introduced. The United States has had a considerable share, shipping direct at one time about 25 per cent. of the total imports, not including the portion of imports received from American manufacturers through Great Britain, Hongkong, and other countries. Of late years the most

notable feature of the trade has been the increasing share Japan has had, partly explained by indirect imports from the United States and other countries through Japan. The trade has averaged in late years about \$250,000 gold annually, imports during the three years previous to 1911 being as follows:

Imported from—	1908	1909	1910
Hongkong.....	11,970	10,725	11,584
Great Britain.....	83,715	62,174	41,727
Japan.....	35,330	31,465	39,337
United States.....	49,120	18,518	13,044
Germany.....	18,517	12,101	8,680
All other countries....	14,033	13,935	15,417
Total.....	212,685	148,918	129,789

There is great variation in the amount of such goods taken from year to year in the various ports, the explanation being that as modern hospitals and similar institutions are installed each port draws unusually upon the world for its equipment. For example, of the unusually large imports in 1909 Shanghai took almost exactly two-thirds. Tientsin also imported heavily that year. Ordinarily Shanghai imports about half of the total, Tientsin about a sixth, Dairen, Canton, and other open ports taking various shares from year to year as demand occasions.

Practitioners and Their Preferences.

The demand for medical and surgical equipment in China and the trade field reached through Hongkong varies in large degree according to the nationality of practitioners. The physicians and surgeons in practice in this part of the world consist largely of missionary physicians and surgeons and English consular or port physicians and surgeons who either engage in general practice or, more generally, engage in practice in connection with some institution or service like the Chinese customs service. There are a few German and French physicians, but English and

Americans are more numerous. It is significant that a physician usually prefers surgical instruments or appliances from his own country, the natural result being that most American imports in surgical lines are for missionary hospitals, while most English imports are for general practice in the open ports, though of course such is not the invariable rule. Considerable American medical goods are imported through Great Britain and Germany.

Dental Appliances and Apparatus.

In dental appliances, apparatus, instruments, and conveniences American goods control everything in high-class trade. American dentists have practically all the high-class business in their line and naturally prefer American equipment, while the merit of American appliances generally commends them to Japanese and other foreign-trained dentists practicing in this field. The number of Japanese and Chinese dentists practicing in Hongkong and the open ports in China is increasing greatly; the business, therefore, also expanding. Many of these practitioners are trained in the United States, some in Japan, and many learn their profession more or less perfectly as assistants in the offices of foreign-trained practitioners here. Chinese of the upper and middle classes are resorting to these foreign-trained dentists more and more frequently and prospects for the profession among these native practitioners are bright. However, for a number of reasons, as, for example, small fees received for most of such native work, the practice is not likely to attract highly trained American or other foreign dentists. The general increase in practice among native-trained men naturally affords increasing demand for materials and equipment.

Both in medical and surgical and in dental equipment there are indications that European trade in such lines is likely to be seriously threatened in the near future by Japanese and other

Asiatic production, but high-grade practitioners will constantly demand American or European equipment, and the increased use of all such goods in connection with the changing life and manner of living in China affords a constantly widening market for American manufacturers in these lines which merit their attention.

Expanding Trade in Medicines.

There has been a most satisfactory and significant growth of the trade in foreign medicines in China during the past few years, and the attention of American manufacturers and exporters of medicines and medical preparations should be given the field. The aggregate imports of foreign medicines into China at present amount to about \$2,000,000 gold annually, while imports into Hongkong for distribution into parts of the Far East other than China increase this total somewhat. Of the imports into China Hongkong furnishes about two-thirds, the goods actually proceeding largely from Great Britain, which also sends direct about 20 per cent. of the total. One of the significant features of the trade is the manner in which Japan's shipments of medicines into China have increased lately. The general situation of the trade is indicated in the following table of imports of medicines for three years previous to 1911:

Imported from—	1908	1909	1910
Hongkong.....	1,025,045	1,001,480	1,294,778
Great Britain.....	104,404	257,544	325,730
Japan.....	153,747	181,912	252,189
United States.....	15,752	19,623	29,630
All other countries....	98,207	150,489	178,214
Total.....	1,397,155	1,701,048	2,080,541

While these returns show that the United States has but a small portion of the trade, American products are really taken in much greater amounts than are thus indicated. Some of the imports into China from Hongkong are of American goods imported into Hongkong from the United States direct, but

the greater portion of American goods of this class generally is shipped by British branches or agents of American manufacturers and are therefore credited to Great Britain instead of the United States. The total trade in American goods is a considerable portion of the whole and the increase in the trade in general is largely in American goods. Pharmacists here say that the chief reason for this is the fact that Americans concerned in the trade are selling high-grade goods and selling them in more convenient and attractive form than their European competitors.

American goods also are becoming more and more popular because they are now marked as to their exact contents, a convenience which European goods do not have. However, there is not much question but that American trade in these lines can be considerably extended. The drug and medicine trade proper consists largely of imports of quinine, various preparations of Epsom salts, castor oil, calomel and the like; tincture of iron and various tonic preparations; and in general the variety and proportion of drugs used and sold in the United States 15 or 20 years ago.

Character of Goods in Demand.

The trade in foreign patent medicines of many sorts is constantly increasing and several brands of goods are being introduced in large volume. The last English mail ship into Hongkong, for example, landed 500 cases of a certain brand of pills manufactured by an American company and sold through English houses. These goods and similar goods are being sold well into interior districts of China in advance of all foreign medicine practice. Several of the latest standard American disinfectants for the toilet table (listerine, glycothymoline, etc.) are being sold in largely increasing quantities. There is a strong demand for American dental preparations and similar goods. The list of patent tonics, invalid foods, and the like, on sale here, is being increased

considerably and several well-known American and English patent preparations have been on the market for several years and their sales are increasing.

There is a constantly increasing trade in all lines of druggists' novelties, rubber pharmaceutical goods, tooth and similar preparations, toilet waters, plasters, and miscellaneous druggists' stock generally. The wealthier classes of Chinese are commencing to use these novelties and luxuries to a greater extent and the use of the simpler and cheaper foreign medicines by the other classes of Chinese who come into touch with foreign practitioners or their Chinese students is increasing. While, as indicated, the great mass of the trade in standard drugs is in lines often considered somewhat out of date in the United States, American forms of various drugs are increasing in popularity and there is unquestionably a chance for the sale of American goods if they are presented properly. The use of American drug preparations is made difficult to a considerable extent by the fact that practitioners in most eastern ports are largely British in training and connections and are not familiar with American goods.

About 12 per cent. of the imports of drugs into China goes to Shanghai and about the same proportion to Canton. Hankow, Tientsin, Swatow, Amoy, Chungking, Wuchow, and other ports follow in the order named, the ports on the coast in South China taking a much larger proportion of the trade proportionately to their population than the ports of the north. With the opening up of China to foreign ideas, which is attending the revolution in its government, there is every prospect of an immense expansion in this trade.

Perfumeries and Toilet Accessories.

As is generally the case in the United States, most of the retail drug establishments in Chinese ports, including the native shops in these ports and in the interior, so far as foreign goods reach,

handle perfumeries, toilet waters, and other toilet accessories in connection with their medicine trade. The import of such goods into China is increasing rapidly. One of the lines of foreign goods first used by many Chinese is that of cheap perfumery. The total imports of perfumery into China in 1910 amounted to a value of \$178,184, as compared with \$136,209 the year before, and total imports into the country, including the imports into Hongkong for local use and resale to other portions of the Far East, will reach at least \$225,000 annually. It is a trade capable of indefinite expansion, for the small peddlers and booth keepers in Chinese villages within reach of open ports handle these foreign perfumes as one of their chief novelties, and all classes of people buy the goods in whatever amount they may be able to afford. Of the imports into China at the present time Hongkong furnishes about one-fourth, the Netherlands about one-sixth, the United States and Japan each about one-eighth, with the rest divided among other nations in small proportion. The United States also furnishes a considerable portion of the imports from Hongkong. Shanghai takes over 30 per cent. of the total imports.

There is a similarly growing trade in cheap toilet requisites of all sorts and it is a fact significant of the sort of goods which are popular that Japan in 1910 furnished about \$159,000 worth out of the total of \$281,000 imported. Hongkong furnished about one-sixth of the whole and Great Britain much of the balance. This class of goods includes particularly cheap face powders, tooth powders, small brushes, mirrors, combs of various sorts, sachets, and all those "novelties" which go to make up the stock of the Chinese peddlers or booth keepers who handle most of this trade. Considerable quantities of such goods are now made in Hongkong and in open ports in China.

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San Francisco, Cal., August 28, 1912.

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No.	Adams, J. H.	78.5
107	Addis, Thomas	93.7
155	Allen, Ralph E.	81.3
126	Ammann, F. X.	79.9
127	Axtell, S. B., 76.6 plus 15	91.6
125	Bailey, S. E.	92.3
141	Barnard, H. D.	86.5
137	Barnes, J. W.	84.0
117	Beattie, W. A.	86.8
139	Beck, Ida A.	78.4
160	Bettin, M. E.	89.3
143	Bohm, John E.	89.7
147	Brown, J. S., 87.2 plus 5	92.2
91	Burnside, Chas.	83.5
89	Bush, H. C.	87.3
90	Cahoon, G. W., 80.1 plus 5	85.1
106	Cain, Maude F., 78.5 plus 5	83.5
20	Casper, E. J.	76.1
101	Chapin, J. E.	80.7
31	Chappel, H. W.	83.6
32	Charleston, V. C.	84.2
123	Clark, Ira J. B., Sr.	83.7
97	Clary, Ernest W.	88.7
96	Cleland, H. O.	78.2
33	Collins, W. F.	77.5
100	Compton, C. S.	91.8
95	Crabtree, E. H.	89.8
99	Craik, C. W., 85.1 plus 5	90.1
148	Davey, E. C.	87.0
159		

158	Davis, Walter W.	75.2	163	Schmidt, A. E.	89.0
165	Deakin, S. M.	75.0	176	Schwartz, C. E.	81.9
110	Dean, C. J.	83.4	11	Spiers, H. W.	84.4
103	Dillon, Jas. R.	82.7	179	Shippey, R. H.	80.1
65	Dozier, L.	83.9	181	Sigwart, J. F.	85.3
75	Duncan, H. B.	83.7	46	Smart, E. P.	78.7
74	Eaves, Jas.	83.4	15	Smith, W. B.	89.1
44	Ellis, W. L., 80.8 plus 5	85.8	13	Speik, F. A.	85.1
42	Evans, C. L.	85.0	10	Stadtmmuller, E. S.	87.7
13	Ewing, E. E.	81.1	7	Stanley, L. L.	80.5
73	Fish, E. S.	89.6	185	Stovall, L.	89.0
71	Flinn, H. J.	79.4	186	Strange, S. P.	85.7
70	Flint, Jas. L.	85.0	187	Srietmann, W. H.	91.0
69	Foote, C. G., 80.9 plus 5	85.9	169	Sweet, C. D.	79.3
68	Foye, Frank A.	80.7	62	Thurber, D. P.	81.3
67	Franklin, G. C. H.	84.8	202	Thurber, W. G.	81.4
194	Fundenberg, G. B., 85.7 plus 10	95.7	184	Walton, G. E.	80.7
161	Gordon, W. C.	75.0	55	Weinberger, J.	84.4
82	Griffith, H. M.	78.3	56	Wier, T. F.	80.9
79	Hadden, J. D., 80.3 plus 5	85.3	52	Wilson, J. C.	93.4
78	Haight, H. W.	77.9	50	Wilson, L. E.	75.1
77	Hall, G. J.	84.9	36	Wilson, P. W.	86.9
76	Hall, W. E.	88.3	154	Woodward, A. G.	82.8
101	Hart, T. M.	83.5	197	Woodward, F. A.	76.1
88	Haskell, P. F., 75.8 plus 5	80.8	37	Wright, P.	87.1
87	Hawkins-Ambler, G. A., 83.6 plus 10	93.6	35	Yager, W. L.	86.0
192	Hirschler, D. L., 81.4 plus 5	86.4	34	Zajicek, O.	86.1
80	Huag, C. L.	86.1	Honorably discharged United States Surgeons: I. E. Bennett, F. J. Conzelmann, J. Creaghe, W. F. deNiedman, A. H. Guernsey, E. S. McClelland, J. A. Metzger, W. E. Purviance, J. D. Yost.		
86	Holmes, A. O.	93.7	The following were granted certificates to practice osteopathy in the State of California:		
84	Hull, F. M.	77.7	115	Baber, K. P.	79.7
85	Hunt, R. C.	85.2	116	Barker, L. G.	85.8
193	Hutchings, R. K., 78.7 plus 10	88.7	134	Beckwith, H. E.	79.8
9	Jones-Mentzer, M.	83.3	145	Bigham, W. L.	81.9
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142	Kelly, F. L.	77.5	164	dePencier, F. H.	75.8
110	Kroll, F. W.	83.6	64	DeWolf, F. A.	81.4
172	Langstroth, L.	86.5	102	Durfee, I. H.	75.9
113	Law, H. E.	86.0	45	Edmiston, C. C.	81.3
136	Leachman, R. S.	79.0	157	Gostick, C. E.	81.9
138	Leake, N. A.	84.3	170	Gotsch, O. E. H.	78.8
130	Lepper, L. E.	92.1	133	Lee, V. R.	84.5
129	Lippman, C. W.	92.4	132	Lee, R. E.	77.1
118	Little, T. C., 75.2 plus 5	80.2	131	Lenhart, J. B.	78.8
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109	Lone, H. E.	89.6	188	Meleski, M. M.	80.7
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152	Martin, E. P.	91.3	178	Shell, L. L.	75.0
153	McClelland, Jas. H.	84.9	180	Sherrill, E. P.	80.2
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AVULSION OF THE SCALP.

SOUTHERN CALIFORNIA PRACTITIONER

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LOS ANGELES, OCTOBER, 1912.

No. 10

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AVULSION OF THE SCALP WITH PRESENTATION OF A CASE.

BY R. L. BYRON, M.D., AND W. E. CARTER, M.D., LOS ANGELES.

We present the following case, not because of its uniqueness, but as an example of what can be done by patience and perseverance in skin grafting in these and allied cases. When we consider that previous to the days of surgical asepsis and antisepsis, cases of avulsion of the scalp were almost invariably fatal, and that by present methods the mortality is less than ten per cent., we are more than ever impressed that Surgery is truly a science.

During the Indian-fighting period of the early history of the continent, scalping injuries were very common, and not a few went on to recovery in spite of the treatment or the absence of it. At the present day, the accident is more common because of the industrial condition which permits employers to run machinery with unencased shafts, belts and fly-wheels.

The great majority of the reported cases of scalping accidents are in women, because of the ease with which their hair is caught in revolving ma-

chinery. Experimentation has indicated that the line of traction to produce this sort of accident must be not parallel to the long axis of the body, but at an angle to that axis. A pull parallel to the long axis of the body, produces an avulsion of the hair alone. An oblique pull, particularly if directed posteriorly, in such a manner that the superciliary ridges can act as a cutting surface, will produce a complete avulsion, by tearing the skin and integument including the aponeurosis of the occipito-frontalis. The line of cleavage may be either above or below the superciliary ridges, extend laterally to about the level of the upper attachment of the pinna of the ear, and posteriorly to the nape of the neck. The victim is usually lifted off her feet, the scalp suddenly gives way and she is dropped to the floor, and often is not aware that she has been scalped until she examines the top of her head with her hand.

The pain incident to these cases is severe just after the accident, and often

*Read before the Los Angeles County Medical Society, April 9, 1912.

continues for twenty-four or forty-eight hours. Hemorrhage is profuse but checks itself in a surprisingly short time, considering the extensiveness of the injury and the vascularity of the scalp. This can be explained in the same way that torsion and traction on bleeding points will often control severe hemorrhages in operative procedure. The intima and media of the arteries give way first, retract, the edges invert and lessen the lumen of the vessel, which soon controls the hemorrhage with the exception of a moderate oozing from the veins.

Among complications, infection takes first rank. This may be pyogenic, septicæmic, erysipelatous or tetanic. The patient may succumb to a primary septicæmia during the first few days or weeks, or to a fatal meningitis resulting from infection through the emissary veins of the skull. In a few cases the outer table of the skull undergoes necrosis, because of the poor blood supply incident to the loss of the epicranium.

The contractions following these injuries are in proportion to the extent of the wound and the method of treatment. Those which involve that portion of the cranium below the superciliary ridges, produce an ectropion of a most distressing character.

The case which we are presenting this evening came under our care on March 29, 1911, suffering from a complete avulsion of the scalp, extending from one inch above the superciliary ridges to the nape of the neck, and laterally to the upper margin of the attachment of the pinna of the ears. The torn margins were perfectly smooth and even, and the calvarium shone like a polished surface. The temporal sheath was involved on the right side and the temporal muscle on the left was ragged and torn, and a three-inch laceration extended down over the left zygoma. The hemorrhage had been profuse as indicated by her clothing and the condition of her pulse. She was conscious, com-

plained of severe pain and a sensation of weight on the top of her head. We saw her fifteen minutes after the accident had occurred, at which time she was still unaware that she had been scalped.

A thirtieth of strychnia and a quarter grain of morphia were administered, followed by subcutaneous injection of fifteen hundred c. c. normal salt solution. The venous hemorrhage was soon controlled by hot compresses. After thoroughly flushing the wound with large amounts of sterile water a moist salt dressing was applied and the patient put to bed.

Daily dressings with normal salt solution were continued for a period of six weeks at which time a pyogenic infection occurred which necessitated the application of bichloride dressings one to five thousand. This latter condition cleared up within two weeks when normal salt dressings were resumed. On June 18, about ten weeks after the injury, the granulations looked so healthy that a grafting operation was decided upon. The patient was given ether and the left half of the head was grafted by the Thiersch method, the grafts being taken from the patient's thighs. The surface was covered with a thick layer of gauze wet with normal salt solution and was not disturbed for forty-eight hours at which time it was evident that all the grafts would take. The salt dressings were continued until July 23, about fifteen weeks after the injury was sustained, when the patient was again anesthetized and the other half grafted by the Reverdine method, the grafts being taken from twenty different individuals. This latter method did not give quite so good results as the former although the result was in the main most satisfactory. Small patches gradually filled in until, in March, about a year after the accident, the denuded area was entirely covered. There was a considerable tendency for the new tissue to break down and ulcerate. A little stimulation

with silver nitrate healed the ulcers in a few weeks. A peculiar condition may be observed at the present time in that the grafted surface has assumed the appearance and texture of the normal skin

of the thighs even to a growth of fine silky hairs.

The dark spots in the picture are due to silver nitrate stains and are not ulcerated surfaces as they appear.

LATE HEREDITARY SYPHILIS.

A Recapitulation—Translated from the French by Dr. Edmond Fournier.

BY LEON JOSEPH ROTH, M.D., LOS ANGELES.

The clinical question, whether or not a certain subject is a victim of hereditary syphilis, confronts us. The subject presents one or more symptoms or groups of symptoms, which may have as their origin a leutic infection. This must be established as a fact, and in consequence an appropriate treatment instituted. But how establish this fact if the parents are non-existent, or even if existent, are reticent, ignorant or falsifiers.

Recognized as a lesion of syphilis, such a lesion may be cured; unrecognized, it follows its course and may terminate irreparably, with mutilation of tissues, atrophy of organs, and more often than is ordinarily known, terminate fatally.

The elements which may serve diagnostically are of two orders. These for the sake of convenience will be presented as follows:

1. Inquest upon the subject's family.

A. Ascendants. This consists in the interrogation of the parents, and their examination. The result of this investigation will be conditional, depending upon the fact of their infection or immunity.

In the first case, the existing syphilis will not be conclusive evidence against their child. It simply signifies that the lesion may be leutic, or by right leutic, but nothing further, because any manner of disease may germinate upon syphilis ground, and not actually be syphilitic.

In the second case, immunity of the

parents is not always absolute, on account of unknown or ignored infection, and the common confusion as to chronologic appearance of lesions and descriptions thereof.

Further, the ancestry must be investigated, for syphilis of the second generation exists, as has been proven by Fournier, and verified in many instances by the clinical observations of others. Illus.

B. Collateral. The interrogation and examination of the subject's brothers and sisters.

a. Infantile poly-mortality.

b. Abortions, premature births, still born babies, children dying in early infancy, sudden infantile deaths, or deaths occurring from unknown causes, premature deaths from convulsions or meningitis.

Fournier's statistics show that seventy-one per cent die before or during birth or before their second week of existence. These same conditions may obtain in saturnism, tuberculosis or alcoholism.

c. Twins. Fournier says that "syphilis makes twins." This is interesting simply from a scientific point of view.

d. Solidarity. Defines the condition where a defect existing in one child, is of identical significance for the rest of a family.

2. Inquest upon the subject.

A. Previous health:

Difficult development; imperfect slow growth, skin lesions, sore throat, eye

*Read before the Medical Symposium Society, Los Angeles, May 31, 1912.

symptoms, and defects. Corneal ulcers and cicatrices, ear lesions, suppuration and discharges, pains in bones, with or without tumefaction, headaches, convulsions.

B. Direct examination of the subject.

a. General physiognomy.

This is frequently denunciatory. Senile decrepitude. The "little old man" that can often neither nurse nor cry, with pasty face and wrinkled skin, almost simian. A classical picture:

But this does not mean that all hereditary syphilitic children have this facies. Some may be apparently in the most perfect health. Consequently caution should be exercised in making a diagnosis, and this decrepit aspect alone considered comparatively.

b. Exterior habitus.

Smallness of stature, stunted, usually below normal height. Illustration—of an average age of seventeen years, twelve cases at St. Louis Hospital, Paris, showed an average height of 1.35 meters, about four feet four inches.

Slow development, late in walking, insufficient growth, peevishness, late in talking. Infantilism, slowness or arrest of development, as evidenced by tardy virility, smallness of testicles, hairs scarce and thin, usually few or no hairs on face genitalia or axillae.

If in a girl—lack of development of breasts, or even complete absence. Retard of menstrual functions, appearing only at seventeen, eighteen or nineteen years, or perhaps later. Hair growth similar to male. For example—girl of eighteen. Breasts equal in development to child of ten, had not yet menstruated, and was genitally bald.

In an adult of this infantile type, errors are frequent in estimating the age, they usually appearing five or ten years younger than they are actually.

Illustration: Woman of forty, in appearance small young girl. Breasts not developed, never has menstruated, no genital hair. Vagina, allows penetrating

difficulty of little finger. Autopsy showed undersized uterus, comparable to that of a ten-year-old girl, and the ovaries which were rudimentary, showed no graffian follicles.

c. Precocious obesity—an adiposity, general and premature, which occasionally persists to an advanced age.

A. Cranial stigmata.

These malformations may be partial, involving a single segment; or general, involving the entire cranium.

A. Partial malformations.

The most common are (a) the frontal protuberances. These are of three varieties.

1. Olympian protuberance. The whole forehead is exaggerated, and instead of a gradual slope from the eyebrows to the hair, the plan is practically vertical, of increased height, and may form an obtuse angle with the root of the nose. A bellied forehead.

2. Forehead with lateral protuberance. These elevations occupying the middle-lateral aspects of the brow. Usually bilateral, and must be accentuated, else escape observation.

3. Forehead en carène. Like the bow of a boat, this usually occupies the center of the forehead; may project 1 or 2 c. m.

These varieties of deformities are usually very evident, and striking to the attention.

b. Lateral and occipital protuberances. Transverse enlargement of the cranium and the natiform skull (*nates*) are other deformities, properly under this heading. These are not so apparent and must be searched for.

B. General malformations.

a. Large crania — globular, ball shaped, and particularly the hydrocephalic. Syphilis is recognized as a frequent cause of hydrocephalus, but it is usually found in early hereditary syphilis, these children not living long enough to take active part in late hereditary exercises.

A case of Prof. Spillmann of Nancy

showed a circumferential cranial measurement of forty-eight inches.

b. Microcephalic cranium, comparatively rare.

c. Dolicocephalic cranium, exaggerated anteroposterior diameter.

d. Scophcephalic cranium, similar to preceding.

e. Aerocephalic cranium, that with a high crown.

C. Cranial assymetry. Where, comparing side for side, marked difference is noted in volume, curves, diameters, inflection and general conformation and this may be associated with facial assymetry, and exist to such a degree that the appearance of each side will be a totally different visage.

Facial Stigmata:

A. Nose. The nasal malformations may be congenital or acquired.

1. The congenital are comparatively rare, and are not as significant as the acquired.

They consist of a flattening and a widening of the base of the nose, just under the frontal spine, the profile of which is concave:

2. The acquired. These are most characteristic, not only from their existing form, but by their pathologic past, because originally the nose was normal, and the malformation was preceded by a chronic coryza, purulent nasal discharge, ozena, epistaxis, expulsion of osseous fragments. All phenomena attesting a destruction of the nasal scaffolding.

There are two varieties of this disfigurement, depending upon which portion of the nose is attacked.

If the bony superior structure is destroyed, it produces what is called the saddle nose, a simple concavity.

If the cartilaginous segment is destroyed, the nose inverts and enters under the superior segment, much as one cylinder enters into another, consequently, as a simile it is called the "nez en lorgnette" (jumelle) opera glass. In other words it is a luxation of the inferior under the superior segment, and

this may be reduced temporarily by traction.

B. Lips and maxillae.

a. Hare lip, either simple, or with palatine complications.

b. Transverse flattening of the face, due to reduction of normal semi-circular contour, which results in lateral flattening and produces what is commonly called the hatchet face.

c. Inferior prognathism, where superior teeth are inside the inferior dental arch.

From this may result irregularities of dental implantation, and default of reciprocal dental articulation.

C. Pavilion of Ear:

The external ear, in the degenerate, is one of the organs that most frequently presents anomalies.

In hereditary syphilis, likewise, many disturbances of normal contour are seen. The ear without a border, distortions of the helix and anti-helix, reduced or exaggerated proportions of the lobe, etc.

The entire ear may be very large, or very small. It may assume a rounded form, shortened vertically and elongated transversely. It may be flat, it may be greatly lengthened in its long diameter, giving rise to what is called the "faun's ear." Many curious deformities are noted, but none more curious than the small tunneled ear, or at the extreme, a complete absence.

These stigmata like many others, are not pathognomonic of hereditary syphilis. They are such lesions as have been frequently seen in this hereditary condition, and if not infallible signs, they are at least sign posts pointing the direction to further exploration.

D. Hutchinson's Triad, consisting of auricular, ocular and dental stigmatae.

a. Auricular. Three orders of things may occur.

1. History of previous ear aches and acute or chronic discharges.

2. Evidence of lesions resulting from ancient otites, cicatrices of tympanum, perforations, destructions of ossicles.

3. Auditory troubles, even leading to deafness and consequent dumbness, and more particularly a sudden complete and permanent loss of hearing, with absence of clinical reasons, and total failure of therapy.

b. Ocular stigmatæ.

These are the most important, the most numerous and most significative.

Previous history, of existing eye pains of long duration, and of serious character; or entire absence of this with termination in blindness, partial or total, of usually both eyes.

Among the principal ocular lesions may be mentioned iritis, iridio-retinitis, chorio-retinitis, and more especially interstitial keratitis, with its subsequent opacities and bilateral tendency to blindness.

Converging strabismus. Fournier, Sr., recognized this symptom seventeen times in fifty cases of hereditary lues.

Corneal, iritic stigmatae and those of the fundus, and functional troubles and disorders.

D. Malformations. Anophthalmia, microphthalmia, cyclopia, colobomatosus.

Malformations interesting the different ocular systems, to-wit: Cranial and orbicular.

Dyssymetry of the orbits, and deviation of eyes from anatomical level. Nasolachrymal deformities.

Palpebral. Agensis, stricture, absence of palpebral opening, ankyloblepharon, blepharophimosis, coloboma, abnormal development of semi-lunar fold.

Microcornea, megalocornea, anterior, hydrophthalmia, congenital corneal opacities.

Persistence, or remnants of the pupillary membrane, aniritis, corectopia, dyscoria, polycoria, iridodonesis, dyschromia, iritis heterochromia, iritic polychromia.

Luxation and extopia of chrystalline lens, microlens, congenital cataract, zonal, pin point and posterior polar cataracts.

Coloboma of the choroid, false staphyloma, and other malformations, as yet not classified.

3. Dental stigmata.

a. These play a part of considerable importance, in the diagnosis of hereditary syphilis. Illustration: Case of female, age 21, has leg ulcerations dating back seven years. Diagnosed and treated as tubercular lesions. Entirely negative to examination, save dental dystrophies. Placed on anti-syphilitic treatment, with entire disappearance of these lesions, which had persisted continuously for seven years, in one month.

Primarily then, in consideration of dental stigmata, is noted a retard in dentition, where normally the deciduous teeth begin to erupt about the 6th or 8th month, a retardation is noted, and evolution begins at the 10th month, 12th, 15th or even later. Demarquay relates in a case of frank hereditary syphilis that at the fourth year a child had not yet walked, and had not yet erupted a single tooth. Lancereau reports a case of hereditary syphilitic child; a microcephalic, idiotic, epileptic, who at the age of 12 had only partially erupted, the lateral incisors and cuspids. These illustrations further demonstrate the primal type of hereditary syphilitic manifestations—the retarded development.

b. Direct dental examination.

Four cardinal stigmatae present themselves.

1. Atrophy of cuspids of first permanent molars.

2. Atrophy of cuspids of entire dentition.

3. The Hutchinsonian tooth.

4. The so-called "screw driver" tooth.

For the comprehension of what follows, it will be necessary to mention certain facts upon the dental histology.

Before the calcareous body is formed, the tooth primitively is a fragment of soft tissue. The incrustation occurs en-

tirely in the alveolus and when the tooth erupts, it is entirely formed and intact in its form and structure, providing nothing occurs in its evolution to alter it.

If interference occurs and the calcareous deposit is insufficient or faulty, the embryonal tooth is recipient of an indelible mark, which will exactly correspond, by its topography, to the epoch, (the time) when the disturbing element attacked it.

The process of dentification (incrustation) always occurs downward, from the summit or crown of the tooth towards their apices. The precise point of beginning dentification is at the most bulging portion of the bulb. The summit of the bulb becomes obscured and a thin ivory-like plate makes its appearance. This in the molars occupies the most elevated tubercle.

If, then, such a tooth is surprised in its evolution by a trouble of nutrition, at a time say, when the incrustation of the summit has already been accomplished. This tooth might be altered in its form and structure, at some level of its crown, but the summit, which was perfectly developed before the disturbing element presented, will be normal in form and structure, and the tooth imperfect below this.

From this, the following rules are classical.

The more precocious the nutritive changes, the closer is the stigmata to the free end of the tooth.

The tardier the change, the further away is the stigmata from this part.

(2) Dentification is precocious beginning about the 17th week of foetal life; and continues up to about the 12th year.

The dates of apparition of the coating of dentine are as follows:

1st dentition:

Incisors and canines, 17th week foetal life.

1st and 2nd molars, 18th week foetal life.

2nd dentition (permanent):

1st molar (erupts at about 6th year), 25th week foetal life.

Incisors, 1 month after birth.

Canines, 3 to 4 months after birth.

Bicuspid, 6 months after birth.

2nd molar, 3 years after birth.

3rd molar (wisdom tooth), 12 years after birth.

It will be noted that at the time of birth the first permanent molar is the only permanent tooth that has begun calcification. On the other hand all the temporary teeth that began dentification before the fourth month of foetal life have completed their calcification by the time of birth.

If the luetic infection strikes at the epoch from the fourth to the sixth month of foetal life, the temporary teeth will receive the blow, providing the foetus survives, but considering the fact that the noxious influence of hereditary syphilis manifests itself strongest and most always during the latter months of intrauterine life and during the first few months of the extra uterine, it is simple to understand that primarily the first permanent molar, and secondarily the incisors and canines will show evidence of the hereditary stigma. With a moment's study, it is possible to determine exactly at what time of the child's life it received its trade-mark, because the dental erosion is a lesion, contemporaneous with the epoch of the tooth formation, and it is the consequence of an interruption, during the process of dentification, due to morbid influence.

These preliminaries established, the malformations will briefly be described:

1. Atrophy of the cusps of first permanent molar.

The tooth is normal everywhere save at its approximate masticating surface, where a rough, rugous, irregular, discolored appearance obtains. This imperfectly enameled surface wears down rapidly, with the result that a shortening occurs, and the crown of the tooth is flat and striated.

These dystrophies are systematized and the different order of teeth always show their own characteristic deformity.

Dystrophies of the cusps.

Cuticular erosions.

Sulciform erosions.

Linear transverse erosions, at any level of tooth, and may persist in its entire circumference. There may be series of graded, parallel circles.

Erosions of cusps, practically an atrophy of the free extremity, same type as of molar previously mentioned.

Hutchinsonian teeth. This is a typical dystrophy, consisting in the semi-lunar deformation of the cutting surfaces of the incisors, principally the upper central, and a characteristic change in the axis of the teeth. A convergent obliquity. These cutting surfaces wear smooth eventually, so actually after the age of 30, Hutchinsonian teeth are rarely seen.

The screw driver tooth is the vulgar variety of central incisor configuration, and is frequently described in conjunction with the **crescent shaped** deformity.

Microdontism and persistence of the temporary teeth. Dental amorphism. Abnormal interlocking of teeth, dental disorientation, abnormal interdental spaces. Permanent absence of certain teeth. Dental ectopia (palatine tooth). Supernumerary teeth.

Stigmata of the skin and mucous membranes. Cicatricial. These are usually differentiated from other scars by the large extent, by brown or black pigmentation, by configuration. The luetic lesions all have a tendency to assume circular shape, or favor a semi-lunar form, in circles or arcs of circles, constituting polycyclic or serpiginous contours.

Location. Lips, mouth, nose, throat, peribuccal region and buttocks. Of these the peribuccal are the most characteristic and frequent. Around the mouth are seen simple and erosive papules, associated with cracks and fissures and developing ulcerations, all these radiating outward from the mouth, these in heal-

ing leave white lines, and a drawn condition of the skin, which are visible frequently, up to adult life, and even through it.

Of the lesions of the mucous membranes, the buccal leucoplasiae are most characteristic (Case Dr. Hudelo), as also the expoliating marginal glossitis, (personal case).

Testicular stigmata.

Sclerosis and atrophy, manifested by smallness and hardness of gland, and by modifications in form; or even of normal consistence and appearance, but small, infantile and undeveloped testicle.

Cryptorchitis, single or double (Ectopic).

STIGMATA OF THE LOCOMOTIVE SYSTEM.

An examination of the osseous system will frequently furnish useful information.

A history of chronic osseous pains, which presented at a very young age, and important on account of their location in the tibial region, which occurred at crises, and noted particularly at night. These pains are mild or severe, usually the latter, and accompanied by functional disorders, and may extend, in duration, over several years. For these reasons, should be considered as suspicious, all cases of children reported to be suffering with growing pains and rheumatism. Prolonged pains of the osseous system constitutes a precious symptom.

Parrot's disease—recognized by the functional impotence of one or more members, without apparent reason or cause, and associated by juxta-epiphyseal tumefaction and pain.

Spontaneous fractures. Oberwarth reports the case of an hereditary syphilitic girl, age 11, who, in one year, had without trauma or other known cause, successively fractured the right, then left olecranon, the left humerus and right clavicle.

Osseous lesions—consisting of oxosto-

ses, hyperostoses, cicatrices adherent to the bones, and local deformities.

The exostoses may occur anywhere in the osseous system, but most particularly on the long bones, and there usually at the epiphyses or diaphyses. These may exist at birth.

The hyperostoses are usually multiple, and thus cause a greater deformity, may increase a bone to twice its size. These outgrowth are often as large as an orange, and may persist throughout life.

Cicatrices adherent to the bones are the results of the healing of gummatous osteoma, and consist of deep, irregular scars bound down to the underlying structures. Their evolution is simply one of necrosis, with exfoliation of sequestra, suppuration, etc.

Osseous dactylitis. A globular or atrophic deformity of the phalanges, and frequently terminate in mutilations of the fingers, with atrophy so marked that only the stump may remain.

The tibia is most distinctive in revealing hereditary syphilis. Not only by the exostoses and hyperostoses, but also by irregularities of surface of the internal border, and crest, which are sown with tuberosities.

The "saber blade" tibia is classical, as also the pseudo rachitic incurvation. This first malformation is formed by a convex anterior curve, with a flattening transversely, and is practically a pathognomonic sign.

Rachitism is not directly a syphilitic manifestation; it appears as a result, or under the influence of specificity, more as a parasymphilitic condition. Any of its deformities may be met with in an heredo. They are perhaps not of syphilitic nature, but may be of syphilitic origin; in other words, the hereditary may be rachitic on account of a minus resistance, or predisposition. In any event, the fact remains that rachitism is classically a stigmata, and may appear in any of the following forms: Cranial deformities, and deforming protuberances, retard in the ossification of

the large fontanelle. Deformities of the long bones, especially incurvations, genu valgum, epiphyseal nodosities.

Thoracic deformities. Flattening of the costal arches, "trichter brust," ridge shaped, by anterior projection of the sternum, the costal rosary, the funnel shaped thorax, a median depression at the sternal region about at the level of the sternum proper and the xiphoid appendix, this is incurved toward the vertebral column, and includes the costal cartilages. The depth may vary from two to five centimetres.

Vertebral deformities. Scoliosis, Kyphosis.

Pelvic deformities; any contractures, or deviations from normal, that eventually might produce dystocia.

Articular stigmata. Chronic bilateral hyarthroses of the knees, wrists or shoulders, evidenced by tumefaction, partial or general deformity, limitation of movement, arrest of growth and even atrophy.

Deforming arthropathies, resulting from osteophytic deposits and usually found in the epiphyses, and frequently mistaken in diagnosis for arthritis deformans, or a non-reduced dislocation.

Arthritis deformans, an entity of hereditary syphilis, is characterized by the same deformities as the vulgar form, and involves the same structures. The differential points are, that in the syphilitic variety it is a stigmata of heredity of the second generation, and that the lesions are present at birth, or appear shortly after. Similar to the axiom concerning twins. Fournier states that "Syphilis makes chronic deforming rheumatism."

Of malformations and luxations of certain articulations may be mentioned clubbed feet and hands, and congenital dislocation of the hip.

As illustrations: Child with double congenital dislocation of hip, with history of infantile convulsions, ocular troubles, discharging ears, retard of development, and as actual lesions, tibial hyperostoses, infantile testicles, small-

ness of stature and the triad of Hutchinson.

Dr. Perrin reports four children, issue of a syphilitic father, all having clubbed feet.

Moncoro's case presented at birth. besides diverse syphilitic accidents, an hydrocephaly, an umbilical hernia, double inguinal hernia, and clubbed feet.

In another family of children of syphilitic origin, two presented clubbed feet, one still born, four died in early infancy, and the last showed Hutchinsonian teeth, a leucoma, a purulent ozena, and an ulcer of the leg, the latter cured by iodide of potassium.

Nervous stigmata:

An hereditary specific is a predisposed subject to the misery that constitutes what Fournier has termed "nervosism." This condition is constituted either by isolated symptoms or syndromes, some of which may rank as denunciatory evidence.

Most important are the commemorative of headaches, or to be more exact, cephalalgias, which are, generally speaking, prodromes of meningo encephalitis, often of grave prognosis.

These head pains may be superficial and localized, regional, and seemingly due to osseous lesions, but most frequently are deep, generalized, and give the impression of meningeal involvement. They are irregularly intermittent, in intensity and duration, are of frequent recurrence; nocturnal in time of appearance and significative by their insistence.

Their duration may extend over a period of eight to ten years, or even longer. And of great import is the fact that these cephalalgias are frequently manifestations of hereditary specificity of the second generation. Closely allied to the head pains are convulsions, and very frequently in obtaining histories of syphilitic families the information is elicited of infantile convulsions and meningitis and death from these causes.

For example: A poorly treated syphilitic marries; his wife always retains

her perfect health, five children are born in six years, all at full term, and apparently in perfect health. They all die from convulsions in the following order of their ages: 5, 6, 8, 18 months, and the last at 15 days.

Hereditary syphilitic children are emotional, nervous to excess, crying without cause or provocation. "Cry-babies" in early and late childhood.

In continuance of urine, not only in early infancy, but persisting to adult age. This is a frequent symptom in degenerates of all classes, but especially in the hereditary specific.

Absence of patellar reflexes is a curious feature and is unexplained, as are the absence or imperfectness of the pupillary reflexes.

Among the rarer stigmata may be mentioned localized muscular spasm, yawning, somnambulism, epilepsy in its different varieties, hysteria, neurasthenia, effeminism, onanism, erotic tendencies, sexual indifference, frigidity, and uranism. Congenital tabes and progressive general paralysis.

The intellectual and moral conditions are affected. The retard in development physically has its likeness cerebrally. The child is backward, its intelligence languid, non-elastic, its memory is poor, and it is inattentive, a retrograde movement may obtain, finishing in imbecility or idiocy.

It is a fact commonly known that stigmata of hereditary syphilis are frequently encountered in degenerate criminals.

MORBID STATES AND PREDISPOSITIONS.

Haemorrhagic diatheses of infancy, including omphalorrhagia, haematemesis, melaena, sub-cutaneous haemorrhages and haemorrhagic syphilides. More rarely haematuria, haemoglobinuria, nasal, buccal, ocular, pleural, peritoneal, meningeal, and intra visceral haemorrhages. These are ordinarily rare observations imputable to syphilis, but they

would be more often associated if research as to the cause were made.

Visceropathies and transposition of the liver, spleen and heart.

Dystrophies. Malformations, monstrosities, among the dystrophies of growth are included giants, as well as dwarfs, or the demi giants, where the trunk and arms are of normal size, and the legs so large as to be out of all proportion. Segments of limbs may be gigantic, a right tibia for instance, 9 c.m. longer than the left, or a normal right hand and a perfectly formed but dwarfed left.

Cutaneous dystrophies.

Ichthyosis, as is well known, is not a skin disease, but a congenital malformation and permanent in duration. Its frequent association with other stigmata has given it recognition as a classical dystrophy.

Naevi—40% of naevi are found in hereditary syphilites.

Dermoid cysts, scleroderma, the chronic prurigo of Hebra, vitiligo bromatosus, and Raynaud's disease, very frequently have this variety of specificity as their origin.

Visceral dystrophies.

Mitral and pulmonary stenoses. Stricture of the aortic orifice, malformations of the valves, diverse arterial alterations, failure of closure of the foramen ovale, with its production of congenital cynao-sis (blue baby). This has been noted in hereditary syphilis of the second generation.

Ectatic veins (dilated veins and varices) are congenital or precocious. Seen usually on forehead, face, scalp, upper thorax, legs, or in rare cases all over the body.

DIGESTIVE SYSTEM.

Inguinal and umbilical hernias have been met with frequently enough to give them a place of importance as possible dystrophies. Dr. Richard Andrews of St. Thomas' Hospital, London, noted sixteen cases of inguinal hernia in 120 cases of hereditary syphilis, in subjects

under two years of age.

Genito Urinary System:

The dystrophies of this system vary greatly as to localization, and are actually rare. They are manifested in the penis, as episadia, hypospadias, glando-prepuceal adhesions, and most important and commonly, smallness of the organ. A curious example of this was seen at the Hospital St. Louis, where in a man of twenty the penis was no longer than the little finger of a child of five or six years.

Scrotal dystrophies include scrotum bifida and adhesions of the scrotum to the penis.

Testicular malformations include the diverse ectopias previously mentioned.

Vulvar manifestations are the fusions of the labia majora to the minora.

Vaginal and uterine deformities are the imperviousness of either or both. The infantile (rudimentary) uterus is not infrequently encountered. An illustration has been previously given.

Cerebro-Medullary dystrophies.

Reduction of the weight of the brain without apparent malformation. This condition attains its minimum in the condition of microcephaly. The dystrophies manifest by cerebral malformations are common enough, and varied as to form; from absence of certain portions of the brain, to rudimentary organ, or total absence. Hydrocephaly has already been discussed.

HEREDITARY TERATOLOGY.

Monstrosities: The term "solidarity" applies here. The development fault of a living or dead child may constitute a stigmata referable to the living brothers and sisters.

Of the hands. Syndactylitis (fusion of fingers or toes), giving boxing glove appearance to hands or clubbing feet.

Polydactylitis (supernumeraries.) Ectrodactylitis, dwarfed, usually without osseous support. Bifidity of the terminal phalanx. Bifidity of the hand or foot, giving a lobster claw appearance. Absence of one or several toes. Absence

of the entire metatarsus and phalanges. Absence of a single bone; for example, the clavicle, radius, fibula.

Congenital amputation of a limb. Malformations of the thorax. Supernumerary mammae, and the monstrosities proper, including evagination, absence of the palate, and the tongue, anal imperforation, intestine reduced to a tube closed at both ends, without oesophagus, or anus.

Vesical extrophy. Anencephaly. Exencephaly. Proencephaly. Mammoth forehead. **Hernia of brain** through orbit, or frontal suture. Two illustrations: Mother hydramniotic, child born without cranial vault, with spina bifida, no brain or spinal cord. Multiple malformations of face, harelip, double palatine fissure, three tongues.

Both parents recently syphilitic. Child's head enormous, no brain, head bound to thorax by a simple pedicle, without vertebrae. Lungs minus superior lobes, heart reduced to only a left side, no oesophagus, intestines composed of only a few convolutions, very large liver, no anus.

In conclusion, syphilitic stigmata are due to pre-existing syphilis; they reveal syphilis. There are but four pathognomonic; the natiform cranium, Hutchinsonian and screw-driver tooth, saber blade tibia, the erosions of the cusps of the first permanent molar.

Dystrophic stigmata, simply attest dystrophies. They neither affirm nor deny syphilis. The common dystrophies are the cranial, intellectual, infantilism, dental, clubbed feet and hydrocephalus. As has been stated before, many of these stigmata may be met with also in the offspring of alcoholics and the tubercular. In either of these three morbid conditions a single discrepancy may or may not be indicative, a collection of these may be denunciatory; a subject may be an hereditary and not show a single evidence of disease, and another of the family may furnish condemning testimony.

Having considered in brief detail practically all of the hereditary stigmata, the diagnosis and treatment remain as the most important considerations.

603-605 P. E. Bldg.

THE CHARACTER OF THE PSYCHOSES, THE METHOD OF EXAMINATION AND THE TREATMENT OF CERTAIN FORMS OF INSANITY AMONG THE ADMISSIONS TO THE NAPA STATE HOSPITAL FOR THE FISCAL YEAR ENDING JUNE 30, 1912.

A. C. MATTHEWS, A.M., M.D.

The question of the value of properly classifying the various forms of insanity can no longer be raised. Since the classification of Kraepelin and its modification have been given to the profession, there has been an ever-increasing interest taken in the study of mental diseases, especially as affects the etiology, treatment, course, duration, and prognosis. Lately the questions of prevention and after-care supervision are assuming the importance they demand. It must have been very discouraging prior to the

Kraepelin epoch in classification to diagnose the various forms as delusional insanity, mania, melancholia, primary or secondary dementia, etc., which gave no indication as to the duration and outcome of the disturbance, and no hint as to proper treatment. With this advance in classification, and the resultant interest taken in the study of mental disorders and their scientific treatment, the day has passed when our state hospitals shall be looked upon merely as places of custodial care. The fact that we have

changed the names from asylums to state hospitals is indicative of the spirit with which the various problems connected with the proper care and treatment of the diseased mind are now being studied.

The following is the classification of the forms of alienation among the admissions for the past year, together with the number of intemperance cases, and those received under the Voluntary Act:

A. Admitted under the Insanity Law.

	Men	Women	Total
(1) Traumatic Psychosis.....	1	0	1
(2) Senile Psychoses.....	35	16	51
(3) General Paresis:			
(a) Cerebral Form.....	37	11	48
(b) Tabetic Form.....	10	1	11
(4) Cerebral Syphilis.....	5	5	10
(5) Cerebral Arteriosclerosis....	6	5	11
(6) Alcoholic Psychoses:			
(a) Deterioration.....	1	2	3
(b) Korsakow's.....	2	0	2
(c) Acute Hallucinosia.....	26	0	26
(d) Chronic Hallucinosia....	1	0	1
(e) Amnesia.....	4	0	4
(f) Amnesia.....	5	0	5
(7) Cerebrospinal Meningitis....	0	1	1
(8) Drug Psychoses.....	3	1	4
(9) Infective-Exhaustive Psychoses.....	2	1	3
(10) Symptomatic Depression....	0	1	1
(11) Depressive Hallucinosia....	0	2	2
(12) Involution Melancholia.....	2	3	5
(13) Depressions Undifferentiated	3	0	3
(14) Dementia Praecox:			
(a) Paranoid.....	17	33	50
(b) Catatonic.....	12	5	17
(c) Hebephrenic.....	10	2	12
(15) Paranoid Condition.....	4	3	7
(16) Manic-Depressive:			
(a) Manic Form.....	20	29	49
(b) Depressed Form.....	2	5	7
(c) Mixed Form.....	4	7	11
(17) Allied to Manic-Depressive..	0	1	1
(18) Epileptic Psychoses.....	10	3	13
(19) Hysterical Psychoses.....	0	3	3
(20) Psychasthenic Insanity.....	0	1	1
(21) Constitutional Inferiority...	3	7	10
(22) Unclassified.....	3	3	6
(23) Not Insane.....	1	0	1
Total.....			381

B. Admitted under Intemperance Act.

	Men	Women	Total
Alcoholics (not insane).....	59	24	83
Alcoholics (insane).....	6	1	7
Drug Habitues (not insane)....	40	8	48
Drug Habitues (insane).....	1	1	2
Total.....			140

C. Admitted under Voluntary Act.

	Men	Women	Total
Senile Psychosis.....	1	0	1
Dementia Praecox.....	0	2	2
Drug Habitue.....	1	1	2
General Paresis.....	0	1	1
Depression Undifferentiated....	1	0	1
Epileptic (not insane).....	1	0	1
Total.....			8

THE MENTAL EXAMINATION.

In order to arrive at a proper conclusion regarding a diagnosis, a thorough and complete analysis of both the mental and physical symptoms is imperative. The first principle in the observation of

mental disorders is to describe accurately and to present the facts so that they can be used in chains of cause and effect. The development of the symptoms and whatever the patient shows should be so established that they would fit into the picture of a pathological process. It is usually of little importance that a person does or says a certain thing, but that he does or says it in a definite setting, gives the act or utterance the value of adequacy or inadequacy, or normal or abnormal working. Hence the important rule in the record that wherever there is anything peculiar to be demonstrated it is necessary to give the facts in their natural connections and conversations in their entirety on the ground that a reaction cannot be judged without a knowledge of the provoking agent.

In the direct examination the mode of approach is absolutely decisive of the result. The reserve of the patient is often very great, or if not the reserve, at least the unwillingness to show a clear picture of peculiar experiences. It is therefore necessary to gain the confidence by treating the patient "as a sensible man or woman." In many cases it is positively essential to interview the patient privately. The statements can then usually be obtained quite freely, often with a feeling of relief in the patient, and a distinct gain in the relation between physician and patient.

That any chances for self-humiliation must be eased with verbal suggestion and that any appearance of obnoxious ridicule or dictation or corrective and unnecessary argument must be avoided, should not require special insistence. The feelings of the patient, the general condition, and the special idiosyncracies are to be kept in mind before all. The utmost care is necessary to make the patient feel that all is done to make a comfortable and wholesome relation to the physician and nurses, the keynote of all our efforts. It is very striking how much more composed and amenable to explanations and conversations many

patients are *just on admission* than only a few hours or a day later if there is any tendency toward mutism, confusion, or suspicion.

THE DIRECT EXAMINATION.

The following headings show the general plan for the systematic examination:

1. Attitude and Manner:

This includes a typewritten report of the patient's adaptation on admission, the general behavior, the appearance, trend of mood and activity (a common-sense picture of the patient's conduct and reaction to the situation, with due reference to the points of special diagnostic importance).

2. Stream of Mental Activity:

This is best studied in the patient's spontaneous account of his troubles, or when this is not given, in the reactions to special questions. This gives us an idea of the spontaneous productivity and of the nature of the stream of thought (flights of ideation, retarded thought, irrelevancy, disconnected utterances, circumstantiality, distractibility, peculiar expressions, stereotypy, echolalia, etc.) Verbatim samples of the patient's talk are required when there is any disturbance in the stream of mental activity or peculiarly in the reactions or utterances.

3. General Mental Attitude:

This includes a systematic investigation of the patient's general mental trend and includes: (a) Emotional tones and special moods; (b) analysis of the delusional and hallucinatory states—their foundation, development, and importance in the entire picture.

4. Orientation:

This is a special inquiry into the condition of the sensorium which includes orientation as to place, time and person. This is necessary in order to establish a comparable and comprehensive estimate of the extent of temporary or fundamental disorganization. Neglect in this direction is the most common defect of many records of cases in which an error of diagnosis must subsequently be admitted.

5. Grasp on Current and Remote Events:

Investigation is here made to ascertain the extent of the impairment of memory. The records in many forms of insanity, especially of non-recognized general paralytics, show ever so often the absence or any evidence of a thorough search for memory gaps and discrepancies of chronological data, all of which are so important and demonstrative for an early and conclusive diagnosis and in court proceedings.

6. Grasp on the Stock and Extent of School Knowledge and General Experience:

The tests here must be varied according to the nationality, the education, and general experience of the patient. An inquiry is made not only into the extent of school knowledge, but also into geographical and historical requirements. Counting and simple tests in calculation also come under this heading.

7. Writing:

The subject is requested to write his name and address, or better still a letter explaining the situation. Valuable information is obtained from the character of the handwriting—is it slow, constrained, or free? Are there mannerisms, flourishes, underscoring? Are there omissions of letters, syllables, or words or transpositions? (important in suspected paresis).

8. Insight and Judgment:

Under this heading we ascertain the patient's judgment concerning the situation, his insight concerning his physical and mental health and efficiency, his financial status, and plans in case of discharge.

To those not familiar with the routine examination the outline given above may seem rather lengthy, but such is not the case with those who are experienced in the work, and especially where a stenographer is accessible.

Referring to the classification, it is noticed that only one case admitted under the Insanity Law was diagnosed as "not

insane." This speaks well for the care with which the cases were considered prior to commitment. But we find nine insane individuals committed under the Intemperance Act—an evident carelessness in failing to enquire carefully into the actual mental symptom-complex. Such conditions will necessarily occur at times unless the utmost care is exercised by examiners competent to judge between normal and abnormal mentalities. This trouble is avoided in those large centers of population which are supplied with alcoholic and psychopathic wards where cases of alcoholism, drug addictions, or suspected insanity can be carefully observed and studied prior to commitment.

TREATMENT.

The limits of this paper will not permit me to take up in detail the various lines of treatments instituted in the different psychoses. Everyone familiar with the care and therapeutics of mental disorders knows that there are certain forms, as general paresis, in which there is a progressive deterioration both mentally and physically; that other forms can be treated only symptomatically and pursue as a rule a chronic course extending over many years, such as the dementia praecox cases; but there are many other varieties in which a definite line of treatment is indicated because we are at war, as it were, with known etiological factors.

As one of these topics I will take up cerebral syphilis. Last year I became interested in this subject and reported on the clinical manifestations of twelve cases with autopsy and four clinical cases. I endeavored to draw certain conclusions which would assist in differentiating the disease from that of general paresis. Most text-books dealing with this trouble refer briefly to the gummatous form, but rarely speak of the vascular and meningeal varieties. We rarely meet with the gummatous condition in our state hospitals, at least that has been my experience, but syphilitic meningitis

is not uncommon. The twelve autopsied cases showed me that some cases pursuing the course of dementia praecox, cerebral hemorrhage, general failure of health, epilepsy, etc., were cases of syphilitic meningitis or syphilitic arterioclerosis. As a result of this knowledge and to ascertain the frequency of cerebral leutic psychoses I endeavored during the past year to make a lumbar puncture upon every new admission so far as possible, and to have a Wassermann test made both upon the spinal fluid and blood. Results: fifty-nine cases of general paresis, and ten cases of cerebral syphilis have been established. I will mention briefly the results of treatment of a few cases of leutic insanity.

1. Female aged 35, married, led an irregular life in early days. Admitted to a state hospital in October, 1910, where, owing to certain clinical symptoms manifested at that time, a diagnosis of manic-depressive (mixed) insanity was made. Transferred to Napa State Hospital in 1912. The mental symptoms did not fit into any one well-defined classification. Physically there was slight speech defect (hesitation and elision of syllables) and sluggish reaction of pupils to light. Spinal fluid revealed from 150 to 200 lymphocytes per 1-12 oil immersion field. Ross-Jones reaction positive, Wassermann . . . (spinal fluid) and . . . (blood.) Diagnosis: Cerebral syphilis. Treatment: Has had two intravenous injections of salvarsan plus mercurial ointment. Improving steadily. Lumbar puncture (9-13-12) gave an average lymphocyte count of only 36.

2. Male, aged 33, married, carpenter, very intelligent. Onset of mental symptoms 6 months before admission. Had so-called "epileptic seizures." Became violent and dangerous at times. Imagined he was a millionaire, etc. Lumbar puncture on admission showed an average of 9.9 cells per field, maximum 16, minimum, 7. Wassermann . . . (spinal fluid) and questionable for blood. Noguchi's butyric acid test positive. Con-

dition improved immediately upon "606" injections. Recovered.

3. Female, aged 42, married, no children. Certificate gave onset as six weeks before admission. "Refused to eat, failed physically, weight was 152, is now 100 pounds. Refused to answer questions and has been in city and county hospital for one week without improvement." On admission was oblivious to her surroundings, very feeble and emaciated, bed-ridden, nausea and vomiting, temperature 100° F. Gastric lavage and tube-feeding required for several days. There were sluggish pupils and slight speech disturbance. Spinal fluid examination showed 100-150 cells per 1-12 field with a strongly positive Noguchi. Wassermann . . . (spinal fluid) . . . (blood.) This case has steadily improved under salvarsan and mercury and has now returned home. Last spinal fluid examination showed an average of only 6.1 cells per 1-12 field.

4. Male, aged 32, single, clerk. "Epilepsy" since 1909. Transferred from another institution to Napa State Hospital in 1912. On admission was somewhat apathetic, thought this was a place where criminals were confined and was poorly oriented for time. Physically speech was hesitating and slurring, pupils equal and presented Argyle-Robertson reaction, absent knee-jerks, gait unsteady, Romberg sign, tremors of eyelids and mouth muscles. (Cell count (spinal) averaged 42; Ross-Jones reaction positive; Wassermann . . . (spinal fluid) . . . (?) (blood.) Diagnosis: Cerebro-spinal syphilis or general paresis (tabetic form.) This case has received this same line of treatment with the result that he is steadily improving. Average spinal cell count (September 13th, 1912) was four per 1-12 field. The improvement would favor cerebro-spinal syphilis.

I might give abstracts of many other cases similarly treated during the past year, but these emphasize the point I wish to bring out. In brain and spinal cord syphilis salvarsan either alone, or

combined with mercury, results in marked improvement, and cure in many cases, especially when early recognized. I have been diagnosing as cerebral lues all those cases with high cell count (100 and above) and find that they respond well to salvarsan, but the question of the value of the high cell count in differentiating brain syphilis from general paresis is still in doubt. From my observation the high count distinctly favors cerebral lues. Bigelow (Am. Jr. Insanity, April, 1911) in thirty cases of general paresis gives the average count as 30.8, and in fifteen cases of cerebral syphilis as 167. Others have claimed that a high count occasionally obtains in general paresis. The absence of a high count in case 4, together with the suggestive physical findings, favors general paresis, but the case is improving under salvarsan. A few of my cases of high cell count, especially those of long standing, have not reacted favorably to salvarsan.

CONCLUSIONS.

(1) A classification is essential to a proper understanding and treatment of mental disorders.

(2) The data for a proper diagnosis can be obtained only by a complete, systematic, mental examination.

(3) General paresis is very frequent in California, constituting over 15% of the admissions during the past year, while the alcoholic psychoses contributed about 10%.

(4) Cerebral syphilis is probably largely unrecognized, especially the meningeal type, unless a cell count (spinal) and Wassermanns are made, because there is nothing definite and pathognomonic regarding the clinical manifestations.

(5) A large number of cases of syphilitic insanity, particularly those in the early stages, respond to salvarsan either alone or in combination with mercury and iodides.

Napa State Hospital.

SOUTHERN CALIFORNIA PRACTITIONER

A MEDICAL, CLIMATOLOGICAL AND SOCIOLOGICAL MONTHLY MAGAZINE.

This journal endeavors to mirror the progress of the profession of California and Arizona.

Established in 1886 by Walter Lindley, M.D., LL.D

DR. GEO. E. MALSBAR, Editor and Publisher

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Address all communications and manuscripts to

EDITOR SOUTHERN CALIFORNIA PRACTITIONER,

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EDITORIAL

EPIDEMIC OF MALPRACTICE SUITS.

Our readers are warned against an epidemic of malpractice suits that has appeared in Los Angeles County. Under the circumstances, we would urge all practicing physicians in this County to take unusual precautions to guard against such persecutions. Especially would we suggest the free use of the X-ray in the class of cases in which radiography may be of value in diagnosis and as evidence of proper treatment. As a matter of self-protection, it is often wise to call for consultation, even though you may be sure that you are right. Unscrupulous attorneys, who take such suits on a contingent fee, should receive the public censure they deserve.

REPUBLICANS ARE DEMOCRATS.

The injudicious activity of Mr. Earl has been such that no self-respecting physician in Southern California can do otherwise than support the Democratic ticket this fall, if he is a true

Republican. We revere and honor our beloved Governor, the Progressive candidate for the Vice-Presidency, but the local condition is such that it is impossible for us to support him. The Progressive ticket, as presented to the voters in Southern California, is composed of men whose nomination has been secured through the activity of Mr. Earl, and no true physician or humanitarian would vote to place this noxious creature in despotic power. If space were abundant we might go into detail. It will suffice to mention the candidate for the Senate from the Thirty-seventh Senatorial District, Mr. Brown. We are informed that Mr. Brown is a gentleman; we do not know him personally. However that may be, he has been for some years the lobbyist of the Christian Scientists at Sacramento, and it is unwise to place such a lobbyist inside the Senate. He owes his nomination to the influence of the Earl papers, through which he received publicity that otherwise would have cost far beyond the legal allowance. Furthermore, his candidacy was

practically forced upon the Progressive committee. And so we might go down the line of candidates upon the Progressive ticket in Southern California. To support that ticket is to place in despotic power an individual whose public acts should render him unfit for human association. (We refer to Mr. Earl.)

THE EARL PAPERS.

These papers, the Express and Tribune, have for a long time been engaged in foul attacks upon the medical profession and its manifold legitimate activities. The unselfishness of our profession cannot be understood by this demon incarnate. Mr. Earl, who has not hesitated to belittle and lie about the preventive work of our local Department of Health and the eminent Commissioner of Health of this city. Even the philanthropy exemplified by the exhibition of noted moving pictures to the school children by the local County Medical Association and the Los Angeles Society for the Study and Prevention of Tuberculosis, was besmirched by this inhuman vampire of our body politic. All sorts of vile falsehoods and evil insinuations have been freely used by his rabid press. It suffices here to recount the attacks upon the physicians connected with the Public Schools before the last election of members of the Board of Education; the attacks upon the muzzling ordinance, when an automobile parade of society women with pet dogs was announced by an individual who at one time drew a fine of seventeen hundred dollars for publishing his ability to prevent conception; and the recent attack upon the Department of Health, marked by the use of startling headlines and the publication of pictures of paralyzed children with the statement that they were being wrongly quarantined. Of course, these papers opposed vaccination and the tuberculin testing of dairy herds.

During the recent epidemic of infantile paralysis, the following headlines appeared in the Tribune:

"Frightened Mothers."

"Germ Scares."

"Absurd Quarantine."

"Fear and Disease."

"Suspects a Scheme."

"Alleges Medical Trust."

"Senseless Scare Costs This City Thousands of Dollars."

"Hysteria of Practitioners Holds Throgs in a Paroxysm of Fear."

"Damage Done by Senseless Scare."

"City Council Members Denounce False Scare."

"Council to Seek Today to End Senseless Scare."

"Practitioners' Hysteria Holds Many Households in Needless Fear."

What Prominent Physicians Say.

Two Genuine cases in 17 days—Dr. O. C. Wellborn.

Stomach Trouble with but few Exceptions—Dr. R. C. Smith.

(Under same heading)—Dr. Carl Schultz.

About as Contagious as Toothache—Dr. George B. Abbott.

Real Cases are Few—Dr. Herbert W. Trescott.

No Reason Exists for Quarantine—Dr. William C. Bailey.

"Civic Bodies Make Move to Combat Scare."

"Move Made to Offset Scare."

"City Council Moves to Offset 'Paralysis' Scare by Thorough Inquiry."

Under this heading there was published the picture of the Piatt children, with the caption: "Gwendolyn Piatt begging to go out to play." You may look up Gwendolyn Piatt, 411 East 42nd Street, in the detailed report of the investigating committee, published in this issue of the Practitioner. She was paralyzed at the time this picture was taken.

"Prominent Physician Scouts Epidemic Talk"—Smith Dabney, A.M., M.L., M.D.

"Physician Tears Theory to Pieces"—Dr. H. L. Wells.

"Theater Managers Act to Abate the 'Scare.'"

"Falsehoods Smut City's Name."

"Children Victims of Their Elders' Scare."

"'Scare' Stories Told; Veterans Are Anxious."

"Figures Show 'Epidemic' Scare is a Needless Menace to City."

"Merchants Deplore the 'Epidemic' Scare."

"Scare Forces Him to Leave His Family."

(This was the Lewis family, 1556 East 54th Street.)

"Think Less Disease and There Will Be Less."

"No Epidemic of Infantile Paralysis."

"Passenger Traffic Cut 10 Per Cent. by 'Paralysis' Scare."

"Here are some of the children whose cases were investigated and the result." That you may look them up in the report, we give the names of the children whose names were published under this heading:

Lourie Oliver, 1003 East 39th Street,
George Golden, 1206 West 23rd Street,

Grace and Herbert Kleppe, 933 East Vernon Avenue. and

Laura Arnaz, 732 Avila Street.

"Sweeping Probe of Scare Is Now On."

Suddenly the Tribune ceased publishing such rot about the "scare." We wonder why. Possibly it became too rank for even Mr. Earl, who had sent his children away in an automobile when the epidemic began. As a matter of record, we may state that we do not know any of the "eminent physicians" quoted by the Tribune. If we did know them, we would promptly cut their acquaintance.

WHAT SHALL WE DO WITH QUACK TUBERCULOSIS CURES?

Upon September 7th the City Bacteriologist of Los Angeles examined a specimen of sputum presented by Mr. Alfred A. Berger and reported finding tubercle bacilli. Thereupon, as is the custom, the tuberculosis nurse, working under the auspices of the Department of Health, sought the patient to give him instructions and inspect his surroundings. The address given led the nurse to the Tubercledecide Company, 703 International Bank Building. Here the nurse was presented a copy of a pamphlet, apparently under the impression that she was a prospective patient. The pamphlet contains the following glowing testimonial:—

Riverside, Cal., Feb. 16th, 1911.
TUBERCLECIDECIDE COMPANY,
703 International Bank Bldg.,
Los Angeles, Cal.:

Gentlemen—I am writing this merely to express my gratitude for what I am convinced your treatment has done for me. If you see fit, however, you may use it as a public testimonial. Not that I wish particularly to become public, but perhaps other victims of the Great White Plague might see, and seeing, eventually find the way to recovery as I have.

As you know, I am of the age when tuberculosis is especially virulent—between 20 and 30. Had been "up and down" with pulmonary tuberculosis for many months—surmising but not knowing the trouble. Finally, when I seemed on my last legs, so to speak, and began to have hemorrhages in wholesale lots, I consulted a specialist. He told me (after I had explained my previous symptoms, and had an examination) that I had had the trouble for two years, at least, and it had taken a bulldog grip on my system.

I treated with the specialist for over a year taking the well known Tuberculin treatment at \$40 per month. Figure it out for yourself; twelve months at \$40 per month—\$480. Did I get well? No indeed. And asking my physician after the year's treatment how long before a cure ought to be effected, I received this answer: "Berger, I know your case from A to Z and it is an absolute impossibility to cure you within two years at the shortest." He did help me. Can't deny that. But after treating a whole year he found not one bit of improvement in my sputum upon examination. Think of it—three years at \$480 per year; \$1440—whee.

Is it much wonder that I "took a chance" on TUBERCLECIDECIDE? Why, \$480 would pay for nearly three years treatments—if it were needed. But the things I had read of TUBERCLECIDECIDE appealed to me more than the financial part of it. They said that with few exceptions, TUBERCLECIDECIDE had effected

a cure within eight months, at the longest and that only the worst cases required that length of time.

Well, for the results—today I am practically a well man. I say practically, because I know I naturally have a tubercular tendency which must be guarded against for many years to come. I feel well, and my every symptom is good, but of course I know enough not to hazard my condition by indulging in boxing matches, dancing or running, for several months in the future. Precaution is my motto at present. I weigh more than I have for four years and am gaining all the time. Have gained four pounds in the last eight weeks. Every one says, "Berger, you are looking better every day."

Now, just how bad was I? Well, these simple statements will suffice to give you an idea. I have had over 40 hemorrhages within the past three years; have had as many as 7 in 24 hours; have lost as much as 4 oz. of blood in one hemorrhage and as much as 20 ozs. in one week's time; have had temperature ranging from 96 in the morning to 104 in the afternoon and have had pleurisy until it seemed I couldn't breathe; have had my weight down to 100 lbs. (I am a six footer.) If that is not enough to convince readers that I was "down and out," I'll add that on two separate occasions I have been confined to my bed for two months at a stretch, and that I was too weak to walk across the room without assistance.

Well, all I can say further is I tried TUBERCLECID; took five months' treatment and am now in business—a man amongst men once more.

Yours with thanks,

ALFRED A. BERGER,

1230 West Seventh Street, Riverside, Cal.

P. S. If by so doing I can help in this great cause, I shall be only too glad to correspond with or interview any person who is interested in TUBERCLECID and its accomplishments.

The Health Department nurse asked if this testimonial was genuine, and was very emphatically assured that there was no doubt along that score. She then asked if Mr. Alfred A. Berger, who gave the testimonial, was cured, and was assured of his perfect and complete recovery. Thereupon she inquired if they would be surprised if she told them that he had presented his sputum to the department of health for examination, and that the bacteriologist had reported finding the tubercle bacillus in it. Mr. Berger was summoned (he was an employe of the company) and the nurse gave him the usual instructions.

The pamphlet contains the following upon its face: "We will pay \$1000.00

reward to any one proving that any testimonial sent by us is not genuine. (Signed) Tuberclecid Company (Inc.)"

And now, gentle reader, why don't you collect that reward?

OF PSYCHOLOGICAL INTEREST.

LOS ANGELES, CAL., Oct. 3, 1912.

SOUTHERN CALIFORNIA PRACTITIONER,
500 Auditorium Bldg., City.

GENTLEMEN:—I was somewhat amused at the reference you made to Mrs. Craig. Mr. Bean and myself in a recent issue of THE PRACTITIONER.

During the campaign the Los Angeles Medical Society, by formal resolution tried to convince the citizens of this city that we were the foes of the medical profession, and that our candidacy was inimical to the health interests of the children. I would call your attention to the fact that the appropriation for the Health Department in the budget of 1911-12 was \$17,380. The appropriation in the budget of 1912-13 for the Health Department is \$28,736, an increase of \$11,356, and this appropriation was made by the unanimous vote of the Board. I think this is sufficient refutation of the absurd charge that we were planning the overthrow of the Department of Health.

I thought you would be interested in this information which proves, I believe, that we were not the foes of the medical profession and do not desire to destroy the Department of Health.

Faithfully yours,

(Signed) REYNOLD E. BLIGHT.

(This is in answer to our editorial on "Verbal Sex Examination," page 454 of the September issue of the SOUTHERN CALIFORNIA PRACTITIONER. We are glad that the budget of the Health Department of the Public Schools has been increased, though it is still inadequate for the proper performance of the work that should be done by that department. However, our editorial did not mention the overthrow of the Health Department, but dealt with the false charges regarding "sex examination," which were

signed by Mr. Blight, Mr. Bean and Mrs. Craig. Those charges were examined by the Board of Education, of which these individuals are members, and were shown to be unqualifiedly false.

Mr. Blight's letter is interesting from a psychological standpoint. Students of pathological psychology will recognize here the evidence of a defective, who declares he is amused by what should cause humiliation in the normal individual. He is "amused" by our editorial, telling of him signing false charges implicating the reputable medical men connected with the Public Schools of Los Angeles, in order to secure his own election as a member of the Board of Education. Did the same high motive actuate the other signers of those sensational pre-election charges, Mr. Bean and Mrs. Craig? Have any of them apologized for their dastardly act?)

PROTECT THE MEDICAL LAW.

The following chiropractic outburst emphasizes the importance of concerted action to protect the medical law at the next Legislature:

"LOS ANGELES, July 1st, 1912.

"*Brother Chiropractor:*

"At a meeting of about thirty of the Los Angeles Chiropractors, a committee was chosen to send out a call to all practitioners in the State as herein set forth.

"We wish to bring to your notice the fact that at present Chiropractors have no legal standing and are not only unable to protect the science and themselves from incompetents but are in constant danger of serious trouble in case of death of a patient, of suits from malpractice, in case of accident and from the 'practice of medicine without a license.'

"In some form the State is bound to regulate the practice of any system of healing and we need to put forth every effort to secure legislation making it possible for Chiropractic to be regulated by a competent Chiropractic board.

"Failing in this, we need to have it represented on a drugless healing board

which in some form is sure to come. It is primarily for legislation that we wish to bring every qualified Chiropractic in the State into a suitable association, so that our efforts may be concentrated upon the one object. If you are in sympathy with us and are willing to assume the obligations involved, please notify the undersigned at once.

"We would say that we believe any misunderstanding remaining from the first association can be amicably adjusted and that much good will come to the science and to our practitioners by such reorganization.

"For the Committee,

"N. W. PHILBROOK, D.C., Chairman.

"327 Con. Realty Bldg., Los Angeles.

"N. W. Philbrook, D. C.; J. T. Lovell, D. C.; C. E. Hutchinson, D. C.; Gregory Gregory, D. C.; Dr. C. G. Michell, D. C.

"P. S.—Today we have received word that four Drugless Healers have been notified at Long Beach to cease business in thirty days. It has been decided to call a meeting of Chiropractors interested, at 337½ S. Hill, Saturday, July 6th, 8 P.M."

(This meeting was postponed.—Editor.)

SOCIAL DISEASE PROPHYLAXIS.

The following resolutions were unanimously adopted by the Orange County Medical Society September 3, 1912:

Whereas, Orange County Medical Society, appreciating the importance of Social Disease Prophylaxis, and recognizing the value humanity has already derived from work done in this line by legislative bodies and the medical profession; be it

Resolved, That the president of this society appoint from its membership three physicians who shall constitute a committee on Sanitation and Moral Prophylaxis to co-operate with other medical societies and with civic and religious organizations, to the end that effective legislation may be enacted to supervise, control and regulate the granting of marriage licenses, making it impossible for any person afflicted with an infectious, contagious or hereditary disease, or for any confirmed criminal, chronic alcoholic, drug fiend, epileptic or other defective, becoming a party to a matrimonial contract.

Further, When a married person has served time in a state penitentiary, in-

sane asylum, home for inebriates and drug fiends or other state penal or charitable institution, and a hereditary taint is found in the family history, that he or she submit to a voluntary or enforced sacrifice of procreative powers before resuming marital relations.

Further, That every application for a marriage license be accompanied by a health certificate from a reputable physician, stating that both candidates for matrimony are free from contagious diseases, are without organic weakness, are not in a special degree neurotic, and are equal to the average in moral character and intelligence.

The resolution was offered by Dr. J. F. Doyle, who was appointed chairman of the committee called for thereby, the other members of the committee being Dr. H. A. Johnston of Anaheim and Dr. A. H. Domann of Orange.

THE LOS ANGELES PHYSICIANS' BUILDING.

The new Physicians' Building will be quite up-to-date. An inspection has been made of similar buildings in other cities with the purpose of installing every known convenience. These will include hot and cold sterilized water, ice water, superheated water, direct and alternating currents of electricity, compressed air, open sanitary plumbing and a telephone exchange with connections for every suite of offices. These are in ad-

dition to the usual equipment of a first-class office building, such as elevators, steam heating and power plant, and vacuum cleaning. The ground floor will be subdivided for a drug store and professional supply houses. The top floor will contain an assembly hall, library and club and committee rooms for the Los Angeles County Medical Association. There will be a total of 600 rooms, and the offices will be so arranged that each will have a private exit to the corridor.

VON NOORDEN IN LOS ANGELES.

Professor Carl Von Noorden of the University of Vienna, Austria, addressed the Los Angeles County Medical Association upon "New Aspects of Diabetes," October 9th, 1912. The address was delivered later at San Francisco, and will form part of the post-graduate course at Boston. The Professor speaks English fluently and created a favorable impression through his engaging personality. These international exchanges of talent serve to make the whole world akin.

EDITORIAL NOTES

NEW OFFICERS.

The following are the newly elected officers of the Clinical and Pathological Society of Los Angeles:

Charles B. Nichols, M.D., President.

Clarence Moore, M.D., First Vice-President.

James T. Fisher, M.D., Second Vice-President.

Hill Hastings, M.D., Secretary-Treasurer.

The Society meets monthly on the fourth Saturday evening.

Dr. and Mrs. Herold B. Osborn, of Santa Paula, were in Los Angeles recently, and expect to make their home in Fillmore.

Dr. A. S. Parker, of Needles, recently spent a vacation along the coast, from Los Angeles north.

Dr. Rexwald Brown, of Santa Barbara, is spending several weeks in the eastern surgical clinics.

Dr. F. A. Brown, of Lompoc, is doing some post-graduate hospital work in Chicago and the east.

Dr. H. C. Rees, formerly of Murfreesboro, Tennessee, has located in Los Angeles with offices in the Hibernian Bank Building (formerly Union Trust).

Dr. Alfred Fellows who has been taking a six months' vacation in Arizona is back again with offices in the Hibernian Bank (Union Trust) Building as before.

Wanted—A microscope of a standard make. Must be in first-class condition. Phone West 4986, or address 2121½ West Jefferson street.

Excellent opening for physician—\$300 per month. Only office chair, desk, medicine, etc., to buy, \$75. Apply to Mrs. Maud Walker, Elsinore, Cal.

The new board of health of Hemet consists of: Dr. A. B. Eadie, Dr. Parrish, E. P. Burnham, Wm. Kingman and W. F. Riesland.

Dr. James L. Wilson, the well-known surgeon, who has served the rebels in Mexico in two revolutions as chief of their medical corps, has returned to New York.

Dr. W. L. Huggins is spending a couple of months among the eastern surgical clinics. The Doctor will attend the Clinical Congress of Surgeons of North America, to be held in New York next month.

Dr. W. H. Fox was one of the physicians actively in charge of the Emergency Hospital at the Grand Army encampment. His name was given us too late for insertion in the September issue.

Dr. J. A. Samnigo, formerly of El Paso, Texas, has located in Los Angeles with offices in the California Building, corner Second and Broadway. Dr. Samnigo is a graduate of the Medical Department of the University of Pennsylvania.

Dr. A. Halden Jones, who has offices with Drs. Bicknell and Ferbert, has been attending the Eighth International Congress of Chemistry, in New York City. He reports a most successful meeting, both as regards attendance and quality of papers presented. Dr. Jones will visit the various medical schools and hospitals in the large eastern cities before returning home.

We are receiving *Oral Hygiene*, a journal for dentists, that is doing a good work in emphasizing the importance of diseased and septic mouths. It is proposed to make the dental examination of applicants for life insurance a part of the medical examination. This is a step in the right direction. Such examinations should be made by dentists, and not all dentists are doing good work along this line, as we can testify from personal experience.

Dr. Thos. A. Stoddard, who for the last three years has been associated with his father, Dr. C. S. Stoddard, of Santa Barbara, has recently returned from a ten weeks' vacation trip to Japan and China. He made this trip as ship surgeon on the Pacific Mail Steamship "Persia," largely for the benefit of his eyes, which demanded rest after close application to bacteriological work. He returns greatly benefited and resumes his professional labors.

Dr. Charles R. Nybery, of Phoenix, died August 27th. A week previously he had gone hunting and fired perhaps 100 rounds of heavily loaded shells. At the time he complained of the kicking of the gun. Two days later hemorrhages began that terminated fatally. He had not previously suffered from hemorrhage, and a physical examination a short time before the incident had failed to reveal the presence of tuberculosis. The Doctor was thirty years old and single.

The California State Medical Board is attempting to make illegal practice unpopular in this state. During the past month T. Leung, a Chinese herb doctor, of No. 903 South Olive street, was placed under arrest, and also Oscar Haas, whose "psychic laboratory" at No. 1169 West Thirty-seventh street was searched, the officers confiscating some salves, medicines and books and a door-sign reading "Dr. O. Haas." We hope the Board will make this cleaning-up campaign as thorough as possible.

During the past seven years, 1129 consumptives have died in Houston, Texas, 90 per cent. of them being natives of Houston. The Houston Anti-Tuberculosis League has issued petitions for a joint city and county hospital. The city and street cars have been placarded and public interest aroused. It would seem that the Texas metropolis ought to attend to this matter promptly, in view of the fact that she has a death from tuberculosis about every other day, some 180 a year.

During the Ocean Park fire, Mrs. E. L. B. Godfrey, a member of one of the oldest and wealthiest families of Philadelphia, effected a rescue of her husband that was well described as thrilling. Dr. Godfrey is in ill-health and was asleep when the fire started. When almost walled in by the flames, he was supported by Mrs. Godfrey through the flying cinders to the fire lines. Dr. Godfrey hails from Camden, N. J., and was formerly president of the State Medical Board of New Jersey and prominent in medical affairs.

Dr. F. R. Burnham of San Diego, member of the State Board of Medical Examiners, is spending six months abroad. Writing us from Munich, August 28th, he says: "We are having a delightful trip. I like Germany, they are a keen, wide-awake, pushing people, but not overscrupulous in their treatment of the other fellow. We have spent some time in Berlin, Dresden and Munich. They are all beautiful cities. We soon leave for Italy for two months, and expect to sail from Naples early in November, as I should be at home for the December examination."

San Bernardino has appointed a health inspector, and again has a board of health. The entire health board, with the exception of the city health officer and the chief of police, resigned be-

cause the administration would not appoint a health inspector. Thereupon a health inspector was appointed. September 4, 1912, the following appointments were made by the Mayor and confirmed by the council: Dr. D. C. Strong, Monte D. Allison and Dr. W. H. Hammack. Dr. Strong is a physician, Mr. Allison is a druggist, and Dr. Hammack is a veterinarian. The gentlemen who had the courage to quit were: Dr. J. R. Liverman, J. L. Hamilton and Dr. A. B. Wise.

Medical history is an unknown factor today in the education of physicians. In the SOUTHERN CALIFORNIA PRACTITIONER for September it was stated that a recent graduate of Harvard Medical College in answer to the question: "For what great achievement toward the preservation of human life was Edward Jenner noted?" (asked at the August meeting of the California State Board of Medical Examiners) wrote: "The discovery of smallpox;" while a graduate of the Medical Department of the University of Pennsylvania, in answer to a similar question about Joseph Lister wrote: "The discovery of Listerine." These were bad enough but we have something worse. In THE SOUTHERN CALIFORNIA PRACTITIONER for April, 1912, we published "The History of Mercury," by Hieronymus Fracastor, being an extract from the delightful translation published by the Philmar Company, St. Louis. We have received several letters addressed to "Dr. H. Fracastor, care Southern California Practitioner," asking for reprints. One of these was from a graduate of the College of Physicians and Surgeons (Columbia University), New York, and another was from a graduate of the Medical Department of the University of Pittsburg. Hieronymus Fracastor was born in 1483 and died in 1553. He was a poet and a scholar and Professor of Logic at Padua. Next.

BOOK REVIEWS

HARE'S PRACTICAL THERAPEUTICS.

A Text-book of Practical Therapeutics, with especial reference to the application of remedial measures to disease and their employment upon a rational basis. By Hobart Amory Hare, M.D., B.Sc., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia; Physician to the Jefferson Medical College Hospital; One-time Clinical Professor of Diseases of Children in the University of Pennsylvania; Laureate of the Royal Academy of Medicine in Belgium, of the Medical Society of London; Member of the Committee of Revision of the United States Pharmacopoeia of 1905. Fourteenth edition, enlarged, thoroughly revised, and largely rewritten. Illustrated with 131 engravings and 8 plates. Lea & Febiger, Philadelphia and New York. 1912. Price \$4 net.

This work has reached its fourteenth large edition in less than twenty-two years, and has thereby established a very exceptional record. In this edition the text has been thoroughly revised, a new introductory chapter has been prepared, and text dealing with salvarsan, tuberculin and vaccine therapy has been introduced, together with a description of Bier's method of treatment by artificial hyperemia. The new ideas in regard to the employment of cardiac stimulants are also taken up.

The true physician should never forget the following rules, which well bear repetition:

When called to guide a patient through an illness, the physician should be constantly a watchman, and a therapist only when necessity arises.

A good physician is one who, having pure drugs, knows when to use them, how to use them, and, equally important, when not to use them.

Any drug which has the power to do good when rightly used, has the power to do harm if wrongly used.

When a physician gives a drug and the patient improves, care should be taken not to ascribe all the good results to the remedy employed. Nature must be given credit for a large part of the improvement.

In the treatment of all forms of disease, the physician must never forget the following influential factors in the case, which are often of greater importance than the measures devoted to the treatment of the disease itself:

1. The maintenance of vital resistance by proper feeding.
2. The elimination of effete materials by the kidneys, bowels, and skin.
3. The relief of annoying symptoms which sap the patient's vitality and often obscure the true state of the system.
4. That sufficient physical and mental rest and sleep are obtained if possible.

Salvarsan acts by reason of the fact that it combines with and destroys the protoplasm of certain parasites found in the blood and tissues without damaging the protoplasm of their host, destroying the *Treponema pallida*, the spirillum of relapsing fever, and the trypanosomes of sleeping sickness. Aside from severe pain, chills, or sick stomach which sometimes ensue after the injection of salvarsan, suppression of urine and even death has followed its use, but these accidents have been usually in cases suffering from renal disease. Should pallor, chill, or emesis occur, the injection must cease. There may be for a time marked reddening and congestion of the local lesions, and under the term of "Herxheimer's Reaction" is described an increase, or darkening, of the syphilitic eruption in the first twelve hours after the injection. Salvarsan is contraindicated in advanced degenerative lesions of the nervous system or kidneys, in advanced tuberculosis, when there is disease of the nervous portion of the auditory apparatus, and in persons who have a marked idiosyncrasy to arsenic. Neosalvarsan seems to be possessed of several advantages: solubility in sterile water without caustic soda, and safety even when given in one-third larger dose.

ARTERIOSCLEROSIS. Etiology, Pathology, Diagnosis, Prognosis, Prophylaxis and Treatment, with a special chapter on Blood Pressure. By Louis M. Warfield, A.B., M.D., Assistant Superintendent and Resident Physician to the Milwaukee County Hospital; Assistant Professor of Medicine, Wisconsin College of Physicians and Surgeons, Milwaukee, Wis.; Formerly Medical House Officer, Johns Hopkins Hospital, Baltimore, Maryland; Member American Medical Association. With an Introduction by W. S. Thayer, M.D., Professor of Clinical Medicine, Johns Hopkins Hospital. Illustrated with twenty-eight engravings. C. V. Mosby Company, St. Louis. 1912. Price \$2.50.

This is a revised second edition of Warfield's well known work on Arteriosclerosis, the only English monograph on the subject. The volume shows a thorough revision, with new chapters on "Blood Pressure" and on "Arteriosclerosis in its Relation to Life Insurance."

As to the use of blood pressure instruments: There are certain precautions which must be strictly observed when deductions are drawn from the manometer readings. The psychic factor must be reckoned with. Any emotion may cause marked variations in the pressure. Excitement and anger are especial sources of error. Even the slight excitement arising from taking the first blood pressure on a nervous patient especially is apt to give false values. Usually the readings must be taken many times at the first sitting and the first few may have to be set aside. Worry is a potent factor in raising the pressure. A walk to the physician's office, especially if rapid, has its effect. The position of the patient when the blood pressure is taken is important. Usually in the office the pressure is taken when the patient sits in a chair. He should assume a relaxed, comfortable attitude. The readings should be made at the same time of day and at the same interval between meals. The pressure in both arms should be measured and comparisons should be made only between readings on the same arm. These precautions may seem useless and even somewhat trivial, and the conditions difficult to control. But un-

less they are carefully observed the readings will be false, no comparisons can be drawn between the readings on different days, and the instrument will most probably be blamed.

Warfield's Arteriosclerosis is an excellent up-to-date work on the subject, well co-ordinating the manifold manifestations of this disease and warning against many sources of error in diagnosis.

THE IMMEDIATE CARE OF THE INJURED. By Albert S. Morrow, M.D., Adjunct Professor of Surgery in the New York Polyclinic; Attending Surgeon to the Workhouse Hospital and to the New York Home for the Aged and Infirm. Second edition, revised. Octavo of 354 pages, with 242 illustrations. Philadelphia and London: W. B. Saunders Company, 1912. Cloth, \$2.50 net.

The work is intended as a guide in emergencies until the arrival of medical aid or when such aid cannot be procured. Though presented in simple language, for the benefit of the layman, it is a work well worthy the careful study of any physician who may be called upon in the emergency treatment of the injured. The writer gives due prominence to the importance of preventing additional injury being done as the result of willing but ignorant attempts on the part of bystanders to do "something." The following simple first aid outfit is recommended: Half a dozen bandages varying from one to four inches in width; a spool of adhesive plaster, two inches wide; a tourniquet; a roll of absorbent cotton; a package of sterile gauze; a package of antiseptic (bichloride) gauze; half a dozen tubes of sterilized catgut and silk; three or four surgeon's needles of medium size; a pair of scissors; a hand brush; a small basin; a bottle of liquid soap; a bottle of bichloride of mercury tablets; a small bottle of carbolic acid; and a small flask for whisky.

Fractures: Crepitus is sometimes elicited during the examination of a broken limb, but it should never be sought for. When there is any com-

plete paralysis. Could not swallow for one week. Now has paralysis of right foot. Age three years.

MOORE, GLENN M., 1027 Overton St. Date of illness, June 9, 1912. No evidence of paralysis in this case. Was quarantined for one day. Health inspector made the diagnosis. Dr. Seager did not agree.

KROCK, HELEN, 2135 Sixth Ave. Date of illness, July 11, 1912. Left arm still paralyzed. Had slight paralysis of left side, which has disappeared with the exception of the arm. Ill thirteen days. Age six years.

MacDONALD, JAMES, 723 Coronado St. Date of illness, July 18, 1912. Fully recovered.

MacDONALD, ELMER, 723 Coronado St. Date of illness, July 8, 1912. Now has facial contractions. (Slight.) Gradually recovering.

TOCKEY, GLADYS, 320 South Olive St. Date of illness, June 23, 1912. Right arm still slightly paralyzed. Gradually recovering.

CLAYBROOK, ED. A., 1224 1/2 West Eleventh St. Date of illness, July 20, 1912. Symptoms, complete paralysis. Died ninth day.

KLINE, 1326 West Seventeenth St. Date of illness, August 1, 1912. Symptoms, recovered but with some dragging of left leg. Mild case.

PLUMMER, 750 Beacon St. Date of illness, August 3, 1912. Moved to Illinois before paralysis set in.

MOUSIA, CRANE, 1205 West Twenty-third St. Date of illness, July 12, 1912. Some doubt for two or three days. Then vocal paralysis, also left side. This was a girl of six years of age. Present condition entirely recovered.

MALY, EUGENIA, 2636 Normandie Ave. Date of illness, July 12, 1912. Paralysis of left foot. Just beginning to move the toes now, September 16, 1912. Boy, age nine years.

FLETCHER, JOHN D., 934 Arapahoe St. Date of illness, July 13, 1912. Complete paralysis. Left side. This was not

a typical case as the child had pneumonia for three weeks before paralysis set in. It has now cleared up. There is some doubt that this case was infantile paralysis. This was a boy two years and three months of age.

CLAUDIA, FAITHFUL, 2164 Third Ave. Date of illness, July 16, 1912. Child ill three or four days before paralysis set in. Age six years. Neck, legs and arm still paralyzed, incontinence. At this date the child is able to move the toes after a hot bath. The right arm and legs are fully restored but the neck, left arm and legs are still paralyzed. This child's brother, age ten, was not affected.

HILBISIL, MARION, 131 West Sixteenth St. Date of illness, July 24, 1912. Child taken ill on Tuesday. General paralysis. Died two days later of respiratory paralysis. Girl, age eleven years.

PELLETT, EDGAR, 334 West Seventeenth St. Date of illness, June 8, 1912. Left arm, ankle and foot flaccid paralysis. Some facial twitching on right side. Gradually improving. Boy, age thirteen.

ALEXANDER, WM. W., 1434 West Twelfth St. Date of illness, July 11, 1912. Slight paralysis left leg. Partially recovered.

LAYNE, JOSEPH, 128 South Normandie. Date of illness, July 21, 1912. Ill two days. Paralysis of both legs. Died second day.

KENDALL, IVY, 151 West Seventeenth. Date of illness, July 1, 1912. Facial paralysis. Recovered.

REPORT ON DISTRICT BETWEEN TEMPLE AND SANTA BAR- BARA WEST OF MAIN.

Dr. F. O. Barnard, chairman investigating committee on Poliomyelitis:
Dear Sir:

In pursuance of our duties as your sub-committee, we submit the following report of cases visited by us:

PHYLLIS KLINE, No. 1326 W. 17th St., age 5 yrs. 3 mos. Taken ill on July 27th, 1912. Temperature, 102. Marked constipation. No headache. No retraction. No vomiting. After two to three days constipation relieved and temperature dropped to normal. Highly nervous and general recovery slow. Had been in quarantine 12 days. Right leg shows some atrophy and a slight foot drop is present. Father was compelled to leave his position as railway engineer but was well satisfied with quarantine regulations.

ALLEN McCRAY, No. 1328 Westlake avenue, age 6 yrs. and 4 mos. Taken ill at Hermosa Beach. Temperature, 101. Pain in the head. Obstinate constipation. Some gastric disturbance. Was ill there three weeks. Mother became alarmed over hearing of Infantile Paralysis and brought the child home and sent for a physician from the Health Office. Dr. P. V. K. Johnson responded. Two lumbar punctures were made. Both negative. Child is up and around. No evidence of the disease at this time in our opinion. Two other children at this house. Both well. Family do not object to quarantine in any way, although this case is only a suspect.

MARJORIE SNALES, No. 2440 Crenshaw Boulevard. A true case of poliomyelitis. Diagnosis concurred in by four physicians. The child was taken ill on August 10th, 1912. The parents objected to us seeing the child on account of her extreme nervousness and aversion to meeting strangers. She has been kept in ignorance of her disease and is a very nervous child at all times. The source of infection is a mystery to the parents as they live in a section of the city where there are only a few houses and she had no playmates whatever. The father is a traveling salesman and said that he had talked to one of his customers in Colton, Cal., about ten days before his child was taken ill, who had three of his children down with the disease. Also that the child had played a good deal with a

strange cat that had come to them and that possibly the disease had been communicated in that manner.

They were well satisfied with the quarantine being placed upon them.

Respectfully submitted,

(Signed)

W. J. JETER, D.O.

L. J. HUFF, M.D.

DISTRICT SANTA MONICA CITY LIMITS AND EAST TO THE RIVER.

Los Angeles, Cal., Aug. 29, 1912.

Dr. Barnard, chairman of the Council
Special Committee:

Your sub-committee, Drs. Salisbury and McNeil, beg to report as follows:

We have this day visited the ten families under quarantine for Infantile Paralysis whose names and addresses were supplied to us by the Health Department. In the ten families we found in all but two children afflicted with a paralysis of one or more limbs. In one family two children are paralyzed, making a total of nine that we saw in the ten families. In one family there was a girl aged twelve who was paralyzed during the epidemic two years ago in Boston. Two children died in the same family during that epidemic, making a total of four cases in this family. In two families in which the quarantine period is now practically out there was no paralysis to be seen. While most of these families live within one or two blocks of other cases, in only one instance could we trace a probable point of infection. The family living at 3626 Adair St. have had three cases in the house. The week previous to the children coming down they lived next door to a case at 411 E. 32nd St. At that time the proper quarantine precautions had not been taken. In no instances did we find the neighbors otherwise than pleased with the regulations that had been enforced by the Health Board and no patient complained to us. The guards reported only one instance of trouble and that

was where the man of the house desired to bring alcoholics in. All the children that we saw were put in quarantine previous to the 17th of this month.

Very respectfully,

S. S. SALISBURY,
H. G. McNEIL.

DISTRICT SANTA MONICA TO SO.
CITY LINE WEST OF RIVER.

Cases examined by Drs. McNeil and Salisbury:

SUMMARY.

Number of patients seen.....	63
Number of visits made.....	67
Patients not able to report on.....	2
Average age	3 yrs. 3 mos.
Number patients died.....	10
Number complete recovery.....	20
Number partial recovery.....	41
Number not paralyzed.....	10
Number paralyzed	51
Number paralyzed in right arm.....	9
Number paralyzed in left arm.....	2
Number paralyzed in both arms....	4
Number paralyzed in right leg.....	6
Number paralyzed in left leg.....	6
Number paralyzed in both legs.....	17
Number paralyzed in both arms and legs (died)	10
Number paralyzed in face.....	7
Quarantined to clear diagnosis.....	2

No.	Name and Address	Paralyzed Age	Recovery	Parts Affected	History of Contagion
1	Paul Unfried, 3626 Adair St.	Yes. 6 years	Partial	Both legs	Yes
2	Walter Unfried, 3626 Adair St.	No. 10 years	Complete	None	Yes
3	Kate Unfried, 3626 Adair St.	Yes. 12 years	Partial	Both legs below knee	Yes
4	Baby Wamsley, 1656 E. 33rd St.	Yes. 14 months	Partial	Both arms	Doubtful
5	Herbert Marks, 1001 E. 34th St.	Yes. 2½ years	Partial	Both legs and neck	Doubtful
6	Junior Moren, 857 E. 38th St.	Yes. 6 years	Partial	Right leg	Yes
7	G. Piatt, 411 E. 42nd St.	Yes. 2 years	Partial	Both legs	No
8	Eliz. Radonitz, 1351 E. 49th St.	Yes. 2 years	Yes	Legs	No
9	Roy Grant, 1261 E. 50th St.	No. 4 years	Yes	Legs weak	No
10	Dorothy Eversole, 977 E. 52d Pl.	No. 7 years	Yes	None	No
11	H. Cristensen, 5882 Crocker St.	Yes. 2 years	Partial	Both legs	No
12	Mary Flynn, 4410 S. Main St.	Yes. 3 months	Partial	Right arm	No
13	K. Grenahan, 3718 McClintock.	Yes. 2½ years	Partial	Right leg	No
14	Edna Crawford, 368 E. 50th St.	Yes. 11 months	Partial	Both arms	No
15	H. Halbedl, 3824 S. Main St.	Yes. 1 year	Died	Both legs	No
16	E. Ingham, 3907 Moneta Ave.	Partial. 5 years	Complete	Both arms	No
17	Harold Fambro, 930 E. 32d St.	Yes. 17 months	Partial	Legs below the knees	No
18	V. Bell, 1132 E. 32d St.	Doubtful 1 year	Perfect	Left leg	No
19?	I. Feinblat, 3005 S. Main St	No	Quarantined to clear diagnosis	Back muscles weak	No
19	L. Best, 1541 E. 33d St.	Yes. 7 months	Died	General	No
20	Hatcher, 1564 E. 33rd St.	Yes. 7 years	Died	General	Doubtful
21	Miller, 1636 E. 37th St.	Yes. 2½ years	Partial	Both legs	No
22	E. Banta, 1622 E. 39th St.	Yes. 3 years	Partial	Left face & arms	No
23	L. Oliver, 1003 E. 39th St.	Yes. 20 months	Perfect	Right leg	No
24	H. Dorothy, 848 E. 39th St.	Yes. 6 years	Died	General	No
25	Mary Dorothy, 848 E. 39th St.	No. 4 years	Perfect	None	Doubtful
26	G. Kleppe, Herbert Kleppe, 933 E. Vernon.	Partial. 6 years Partial. 9 years	Perfect Perfect	Left leg Both legs	No No
28	A. Weeks, 1011 E. 43d St.	Yes. 2 years	Partial	Left arm and leg	No
29	R. Rubble, 305 E. 47th Pl.	Yes. 3 years	Partial	Both arms and legs	No
30	G. Corbett, 3627 Trinity St.	Yes. 2 years	Partial	Both legs	No
31	Mary Corbett, 3626 Trinity St.	No. 5 years	Complete	None	No

32	B. Phillips, 4438 Metler St.	Yes. 4½ years	Partial	Right arm	No
33	Doroth Phillips, 4438 Metler,	Partial 2½ years	Partial	Right arm and leg	No
3	A. Anderson, 1762 E. 43d St.	Yes. 9 months	Partial	Right arm and leg	No
	J. Swelling, 1800 E. 43d St.	Partial 2½ years	Perfect	Neck muscles	No
	R. Brown, 1619 E. 42d St.	Quarantined 10 days to clear diagnosis.			
	F. Ricker, 4905 Compton.	Yes. 4 years	Perfect	Left foot and leg	No
	R. Grant, 1261 E. 50th St.	No	Perfect	General weakness	No
39	M. Williamson, 1261 E. 51st St.	Moved out of the city.			
40	H. Goldstein, 1244 E. 47th Pl.	Moved out of the city.			
41	L. Fehr, 1160 E. 47th St.	Yes. 8 years	Perfect	Both legs	No
42	E. Lewis, 1556 E. 54th St.	No. 2 years	Perfect	None	No
43	R. Byrne, 406 E. 66th St.	Yes. 4 years	Partial	Both feet	Yes
44	C. Erwin, 405 E. 66th St.	Yes. 2 years	Partial	Right leg	Yes
45	L. Cass, 505 E. 67th St.	Yes. 6 years	Partial	Right face and leg	Yes
46	Helen H. Johnson, 5908 Towne Ave.	No. 10 years	Perfect	None	No
47	C. H. Terry, 2084 W. 29th St.	Yes. 34 years	Partial	Both legs	No
48	J. Welch, 924 W. 78th St.	Yes	Partial	Both legs	Unknown
49	G. Hege, 3504 4th Ave.	Yes	Partial	Left leg	Doubtful
50	J. Stolle, 1292 W. 35th St.	Yes	Partial	Left leg	No
51	James Love, 156 W. 35th St.	Yes	Partial	Left leg	No
52	J. Murray, 1592 W. 48th St.	Yes. 5 years	Partial	Both legs	Yes
53	G. Kanst, 1600 W. 50th St.	Yes	Partial	Face Muscles	No
54	L. White, 629 W. 42d Pl.	Yes	Partial	Both legs	Doubtful
55	L. Huber, 356 W. 50th St.	Yes	Partial	Left eye and right leg	No
56	C. McCullen, 148 W. 52d Pl.	Yes	Partial	Right leg	No
57	L. Jackson, 229 W. 56th St.	Yes	Partial	Right arm and right side of neck.	No
58	B. Paulson, 1454 W. 54th St.	Yes	Partial	Face and both legs	No
59	M. Greoldinger, 124 W. 57th St.	Yes	Partial	Both legs	Doubtful
60	Peter Greoldinger, 124 W. 57th St.	Yes	Partial	Right arm and leg	Doubtful
61	D. Fager, 361 W. 60th St.	Yes	Partial	One arm and one leg	No
62	B. Richards, 1702 W. 56th St.	Yes	Died	General	No
63	E. Ward, 2551 W. 33d St.	Yes	Died	General	No
64	D. Sparling, 428 W. 80th St.	Yes	Died		
65	W. Douglas, 416 W. 60th St.	Yes	Died	General	No
66	Donald Sparling, 428 W. 80th St.	Yes. 1 year	Died	General	No
67	Josephine Sparling, 428 W. 80th St.	Partial	Perfect	Neck and legs	No
68	McCredie, 468 E. 46th St.	Yes	Perfect	Left face, arm and leg	Doubtful
69	Florence McKee, 3843 Wall St.	Yes. 5 years	Partial	Right leg	No
70	Jas. Burton, 1265 W. 39th Pl.	Yes. 6 years	Partial	Right leg	Doubtful
71	Margaret Burton, 1265 W. 39th Pl.	Yes. 8 years	Died	General	Doubtful
72	Ruth Burton, 1265 W. 39th Pl.	Yes. 10 years	Partial	One arm	Doubtful
73	Miss Chamberlain, 4116 Woodlawn St.	No. 16 years	Perfect	Fever 3 days	Not known
74	Roy Knight, 5122 Latham St.	Out of the city.			

SUMMARY ON DISTRICT PICO TO SANTA MONICA AND MAIN TO RIVER.

Cases examined by Dr. Barnard and
Mr. Miller:

Number of patients seen.....	39
Number of visits made.....	45
Number of patients not able to re- port on	4
Average of patients' ages.....	4.4
Average of patients' ages with 42 yr. man out.....	3.2
Number of deaths.....	8
Number of partial recovery.....	23

Number of complete recovery.....	6
Number of paralyzed.....	33
Number of not paralyzed.....	6
Number paralyzed in the right arm..	6
Number paralyzed in the left arm...	2
Number paralyzed in both arms.....	2
Number paralyzed in the right leg...	4
Number paralyzed in the left leg....	5
Number paralyzed in both legs.....	13
Number paralyzed over the whole body (general)	5
Number paralyzed in face.....	7
Number paralyzed in eyes.....	1
Number paralyzed in back or abdo- men	4
Number of above who are perma- nently crippled in one or more ex- tremities estimated at.....	10

No.	Name and Address	Paralyzed Age	Part Affected	Recovery	History of Contagion
1	H. Wallingham, 848 E. Adams St.	Yes	General	Died	No
2	Lillian Statio, 1380 E. 23d St.	Yes. 3½ years	Both arms, face and neck	Partial	Yes
3	Perrin, 1316½ S. Los Angeles St.	No	T. B. hip and meningitis	Died	No
4	Chas. Robinson, 1407 E. 23d St.	Yes. 4 years	Left leg	Partial	No
5	Henry Greeve, 1365 E. Washington St.	Yes. 10 years	Both legs and eyes crossed	Partial	No
6	Helen Greeve, 1365 E. Washington St.	Yes. 6 years	Both legs	Complete	No
7	Albert Dalton, 1932 Compton	Yes. 7 months	Right leg and right arm	Prtial	No
8	Tyrus C. Inco, 1616 E. 22d St.	No 18 months		Complete	No
9	Harrison Cooper, 2715 Long Beach Ave.	Yes. 2 years	General	Died	No
10	Geo. Rieder, 2311 Central Ave.	Yes. 16 months	Right leg	Partial	No
11	R. Leuschner, 1012 E. Adams St.	Yes. 2½ years	Right leg and right arm	Complete	No
12	Elsie Wild, 1943 San Pedro St.	Yes. 8 years	Back and Abdomen	Partial	No
13	Moses Schwartz, 833 E. 29th St.	Yes. 21 months	Both legs and back	Partial	No
14	N. Gangham, 2819 Griffith Ave.	Yes. 3½ years	Left leg, left arm face	Partial	No
15	Althea Brown, 1218 E. 28th St.	Yes. 4 years	General	Died	No
16	Baby Leonard, 1243 E. 25th St.	Yes. 17 months	Right leg	Partial	No
17	Salvada Dios, 1839 E. 16th St.	Yes. 3 years	Both legs	Complete	No
18	Anton Hernandez, 1614½ Staunton Ave.	Yes. 6 months	Right Arm	Partial	No
19	Baby Hubbard, 1418 E. 17th St.	? 5 years	Meningitis?	Died	No
20	Evelyn Gove, 1548 E. 20th St.	Yes. 10 months	Both legs and abdomen	Partial	Yes
21	Jas. Luther, 1570 E. 21st St.	Yes. 3 years	Both legs	Partial	Yes
22	C. Larson, 921 E. 22nd St.	Yes. 42 years	Both legs and back	Partial	No
23	Bernice Long, 620 E. 25th St.	Yes. 4 years	Face	Partial	No
24	R. L. Beverley, 1019 E. 14th St.	Yes. 3 years	Both legs	Partial	No
25	P. Gutierrez, 1522 Lemon	Yes. 3 years	Right arm and right face	Partial	No
26	Josie Oloi, 1518 Lemon	Yes. 18 months	Both legs and right arm	Partial	No
27	Ruth Emerson, 925 E. 25th St.	Yes. 5 years	Left leg	Complete	No
28	Warren Morse, 1026 E. 24th St.	Yes. 3 years	Both legs	Partial	No
29	Clara Krogan, 1442 E. 20th St.	Yes. 4 years	Right arm and Face	Partial	No
30	Willa Flagg, 1378 E. 15th St.	Moved away		Died	No
31	Katie Fallis, 1532 Palomares	Yes. 3 years	Left leg, face and throat	Partial	No
32	Thelma Cassell, 2619 Geraldine	Yes. 5 years	General	Died	No

33	Everett Mitchell, 128 E. Washington St.	Moved away			
34	Eula Beebe, 126 E. Washington St.	Yes. 12 years	Both legs	Partial	Yes
35	C. O. Smith, 404 E. 16th St.	Yes	Both legs	Partial	No
36	Dorothy Brown, 29th and Compton	Yes. 5 months	Both arms and both legs	Partial	No
37	Jaenette Brown, 29th and Compton	Yes. 2 years	General	Died	No
38	Edna Furies, 504 E. 23d St.	Yes. 5 years	Left leg, left arm and face	Complete	No
39	Virginia Olympius, 1506 E. Adams St.	Moved away.	House very dirty.		
40	Bennie Ivener, 2218 Naomi St.	Moved to Polio. Hosp.			
41	Hanson, 1627 E. 23d St.	Moved away.	No information obtained.		
42	Marion Gove, 1548 E. 20th.	No. 2 years	Weak	Complete	Yes

Aug. 29, 1912.

REPORT OF THE DISTRICT BE- TWEEN PICO AND SANTA BAR- BARA FROM MAIN TO THE RIVER.

Cases examined by Dr. F. S. Barnard
and Mr. C. Hunter Miller:

Number of cases under quarantine..	6
Number showing definite paralysis at present	4
Number that had paralysis as re- ported by the mother but now well to outward appearances.....	1
Number that had only slight loss of knee reflex during the attack but now well to outward appearance..	1

In none of these cases could the source
of the contagion be ascertained definite-
ly. One case, now moved away, was
caused by a case we examined living next
door which had come in personal contact
with the patient.

Your committee further investigated
some twelve cases of the disease which
had been released from quarantine. In
practically every case there was a
marked paralysis of one or more groups
of muscles, those of the legs or arms be-
ing the most frequently involved, but in
some the face, in others the back; in fact
there did not seem to be any part of the
body exempt. In two cases where death
had occurred the symptoms given showed
paralysis of the muscles of the throat
and respiration.

Respectfully submitted,

F. S. BARNARD.

C. HUNTER MILLER,

Sub committee.

REPORT OF DRS. MERRILL AND CONRAD ON DISTRICT FIRST TO PICO AND COUNTY HOSPITAL.

Number calls made.....	32
Number cases seen.....	26
Number cases unable to locate.....	9
Positive diagnosis	18
Tentative diagnosis	9
To clear diagnosis.....	1
Number cases deaths.....	6
Number cases paralyzed.....	18
Number cases paralyzed general....	3
Number cases paralyzed 2 arms....	2
Number cases paralyzed 2 legs....	3
Number cases paralyzed 1 arm.....	3
Number cases paralyzed 1 leg.....	3
Number cases resulting from contact	1
Number cases exposing others and no disease	25
Number cases poor sanitation.....	15
Number cases paralyzed 1 arm and 1 leg	2

Los Angeles, Cal., Sept. 2, 1912.

Mr. President and Members of Investi-
gating Board:

In pursuance of our duties, we visited
the following Poliomyelitis patients:

MRS. E. O. WINEN, 774 East 12th
St., age 25, took sick July 25th, tem-
perature, 102; frontal headache and
cervical pain for 4 days, followed by pa-
ralysis of thigh muscles. Both knee re-
flexes lost; still has stomach trouble;
limps at present and has to watch feet
closely when walking. Had come in con-
tact with sick child, diagnosed as polio-
myelitis.

JENNIE LARSEN, 775 E. Pico St.,
age 13 months. Disease commenced six
days after contact with another child at
763 Pico street. High fever, vomiting,
etc., followed in 4 days by paralysis of
left leg and back. Two other children
in the house escaped. Had come in con-

tact with an adult who was mother of sick child.

EARL RAFERTY, 763 E. Pico St., age 6, took sick 5 days after Leland, his brother, who died. Complained of pain all over body; temperature, 103; obstinate constipation. Paralyzed on sixth day of illness. Still paralyzed in lower extremities. No reflexes. Had come in contact with sick child.

ARTHUR JACOBS, 1833 Bridge St., age 10 months, commenced with fever, vomiting, spasms and paralysis of left eye, which still persists. Constipation severe. Diagnosis not positive.

COUNTY HOSPITAL PATIENTS.

NORMAN GROSSE, age 5, on June 12th felt sick, but walked around. On June 13th paralyzed completely below neck, involuntary stools and passage of urine, severe pain, bowels bad for two weeks. Seems to be recovering gradually.

ROSIE ELKINS, age $2\frac{1}{2}$, at first seemed sick, but moved about; next day would play and sleep a great deal, had high fever. No vomiting or diarrhea; pain intense, tonsils and cervical glands enlarged, severe rigidity of neck and extremities. Temperature, 102. No paralysis.

(Signed)

ANDREW O. CONRAD, M.D.
E. S. MERRILL, D.O.

INVESTIGATION OF POLIOMYELITIS CASES.

Cases examined by Dr. J. Park Dougall and Mr. C. H. Miller:

On August 28th, 1912, in company with Mr. Giffen and a stenographer, I, (Dr. Dougall) called at the Poliomyelitis Hospital on Bernardo street, where by appointment I met Dr. A. H. Jackson, who had a case in this hospital. In talking with Dr. Jackson he stated that he did not believe Infantile Paralysis to be contagious, that the case he had sent in was the only known case from that locality, Naomi street, the mother and her house being very clean. He stated

that in his mind there was some susceptibility, or the child had some constitutional weakness, or that the climatic conditions had something to do toward the disease.

The matron in charge stated they now have four children, and one adult male in the hospital, the four children having the Infantile Paralysis. She stated they had lost a beautiful boy of two years that morning with Infantile Paralysis, the immediate cause of death being paralysis of the respiratory center.

We then visited the patients, beginning with Bennie Ivener, five months of age. The mother accompanied the child, and stated they resided at 2218 Naomi street. The patient looked healthy, was laughing and playing on the mother's lap. The mother of this child had talked at the fence with her next door neighbor, who had her child of five years in her arms, as it was not feeling well, although no apparent trouble developed. The patient began vomiting on August 4th, had a high fever, paralysis noticed the same day, also tenderness over the left shoulder.

Patient entered the hospital on Aug. 16th, and the history chart showed:

		Maximum Temp.	Minimum
August	16.....	100	98
"	17.....	99	98.6
"	18.....	99.2	98.6
"	19.....	99.2	98.6
"	20.....	99.4	99.4
"	21.....	99	98.6
"	22.....	99	99
"	23.....	99.4	99.2
"	24.....	99.2	99.2

25th, 26th and 27th not given, although on the 25th patient was reported as in good condition, 26th improvement noticed, also that patient moved the limbs which were formerly paralyzed, also the fingers. The paralysis in this case was more noticeable on the left side.

2nd case. We next visited Lester Leonardi, 13 months old, whose mother had accompanied him; had lived on Grover street; mother could not speak English. Nurse stated that the patient had taken sick on August 12th, reported to the Health Office on the 12th. On exam-

ination, paralysis of the right arm and leg was very noticeable, neck retracted, patient cried when handled, coarse rales all over the thorax, was feverish, had a nasal discharge and was in a comatose condition.

History chart showed patient had entered on the 17th of August; temperature, 99.4; very difficult respiration; seemed very low. August 18th temperature 101.3; on 19th, 20th and 21st, temperature ranged from 99 to 100 degrees. On 19th patient had several spasms during the day, spasmodic twitching of the left side; on 21st had Cheyne-Stokes respiration, with external strabismus of right eye. On 22nd frequent spasms of arms and legs with Cheyne-Stokes respiration and irregular pulse. Frequency of spasms decreased on 23rd; from 21st to 23rd temperature ranged from 99 to 101.4; 24th, maximum temperature 102, with very frequent spasms, becoming more prolonged; 25th and 26th, maximum temperature 100, respiration and pulsation very poor; 27th and 28th maximum temperature 101.4, with rigors and rigidity.

3rd case. We next visited Margaret Johnson, a girl of two years and nine months. Mother accompanied her to the hospital. She stated that in her opinion the child had been very sick when brought there, as she was paralyzed on the right side completely, also the left leg, had a nasal discharge, constipation, nausea and vomiting. Nationality of the mother, American; talked very intelligently. On examination of the patient we found her very much improved, able to eat and play, although recumbent in bed, still a slight amount of paralysis present on the left side.

History chart showed the patient had entered the hospital on August 16th, symptoms, headache, stiff neck, high fever during night, very restless. A case of Infantile Paralysis had been reported four blocks from their home.

	Minimum Temp.	Maximum
August 17.....	101.4 deg.	102.3
" 18.....	101	101
" 19.....	100.4	101
" 20.....	100	100
" 21.....	99.2	102

23rd, 24th, 25th and 28th average temperature 99.2. It was noticed that the patient began to move the limbs on the 26th. The nurse stated that simple remedies had been used, such as baths, massage, etc.

4th case. We next saw Irene Zimmerman, whose mother had accompanied her, who stated that they had resided at 3625 Pomona street; that the patient was two years old last June; that no sickness of any kind was near their home. That on the 17th of August the patient was first taken sick, vomited, but the mother thought this was due to indiscretions in diet. On the 19th the patient complained of pains in the legs and body, retraction of the head and drowsiness were next noticed, "power in right leg." Patient had entered the hospital on August 23rd. History chart showed fairly good condition; temperature, 98.4; on the 24th temperature was 99.2; on the 25th, temperature was 98.6; 26th and 27th, temperature was 98.6; 28th, temperature was 99. On examination the patient seemed in good condition, slightly tympanic, but was improving.

These are all without doubt true cases of Poliomyelitis.

5th case. J. F. Anderson, male, 34 years of age, nationality Norwegian; formerly of San Bernardino, was in the employ of the Santa Fe R. R. Had a stiff neck for one week before he left San Bernardino, then became paralyzed the night before he left, August 13th; was sent to the Santa Fe Hospital in this city, later transferred to this hospital. On examination, complete paralysis was evidenced; the nurse stated that even the vocal chords had been paralyzed but they were now enough improved so that he could articulate fairly well. Profuse perspiration, excess of sticky saliva, no discharge from the nose, rash on the back and shoulders, complained of ex-

treme pain in the kidneys, limbs sensitive to touch, twitching of muscles of limbs on touch, pus in the urine. Patient stated that he did not know the cause of his father's death, twenty years ago; has a mother and one brother living. Stated that he had been a "core" carpenter for the Santa Fe for the past two years. No venereal disease in the family. (This appeared to be a case of Landry's paralysis.)

This completed the cases in the Poliomyelitis Hospital, where we were accorded every courtesy by the matron in charge, also by Dr. Orbison, who arrived during our visit.

We then visited Mrs. E. R. Arnaz, at 732 Avilla street, nationality Spanish, well versed for a foreigner; interviewed the mother, also saw her five children, ranging in age from four to fifteen years, all looking exceptionally well. The patient, a girl of four years, looked well and strong. Mother gave the history of patient having a slight cold, no nasal discharge, but had some fever and headache, thought she might be bilious, so gave her some castor oil, which she vomited up; they then called in their physician, Dr. Clinton Roath. After examining the child, he notified the Health Office, and they were quarantined on the 20th inst. The mother stated that the child had never been sick in bed at any time, had been eating everything. Mother does janitress work in the schoolhouses, and with the children, assists husband in supporting the family. There were no other cases quarantined in this locality.

On Thursday, August 29th, in company with Mr. Giffen and a stenographer, I visited a patient quarantined at 1226 Sunset Blvd., namely, Dorothy M. Hikes, case of Dr. Thorpe. Found the patient playing in the yard. On interviewing the father, learned there were four children in this family, youngest child, 13 months, none of whom had any sickness. The patient, age four years, was taken sick on August 1st, acted similar to sunstroke, limbs stiff, void of motion, very

constipated, no change for five days, then paralysis was noticed in left arm, gradually decreasing in the legs. A slight amount of stiffness was still noticeable in the left arm, and patient could not raise it more than a few inches. Mr. Hikes stated that he had been treated exceedingly well by the Health Office, and had no complaint to make.

Next visited a case at 896 Bryan St., which was under the care of Dr. Frick, who was able to be present. Dr. Frick stated that the patient, Trowbridge Stephens, a boy of two and one-half years, had taken sick on the 12th of August, although he had not been called until the 16th, when he found the patient had a very high fever, stiff neck, had also vomited. Decided it was a case of Poliomyelitis, and had the patient isolated upstairs with a trained nurse. Patient is reported now comparatively well. This patient we did not see. The father stated there were two other children in the family, but they had evidenced no symptoms of the trouble to date. (Mr. Stephens also stated that he was exceedingly well pleased over the treatment accorded him by the Health Office, and was glad to stand quarantine to protect others.) He is an American, and well educated.

Next visited a case at 532 Echo Park Ave., Ernest Howell, child two years and one month old. Father of the patient stated that on Wednesday morning the child ate breakfast as usual, but immediately after acted drowsy, and climbed on the lounge, where after a few minutes he acted quite sick, drowsy, stiff neck and head retracted; 'phoned for their physician, Dr. Rea, and were quarantined on August 21st. On the afternoon of the same day the patient had a severe spasm, after which the shoulders seemed paralyzed, which later improved, then the limbs became motionless, and at present only the left leg seemed paralyzed. Patient able to be held in their arms, and had been unconscious only during the spasm. Another child in the

family, a boy of four and a half years, has had no trouble to date. (Father stated that he had no complaint to make against the Health Office. While a great hardship to lose his time and wages for a month, he said he would rather lose six months than feel that he would endanger anybody's else child by contagion).

Note.—Next door to this a family of five children lived, one of whom was not feeling well.

Next visited a case at 747 North Hill street, case of Dr. Still. Found a girl of three years, Spanish nationality, able to walk around. The mother stated that the child had been feverish for two days, so she had called a doctor. It was noticed that the right side of the face was slightly affected, mouth pulled to left side, the left eye had also refused to close completely. No nasal discharge. The mother had taken care of the child, as she had been sick only a few days, and was not now under treatment. The husband was working and sending her supplies.

Next visited 2244 San Fernando Road, found a Spanish family in very straitened circumstances. This was the case of Dr. Thompson of Burbank, although Dr. Cowin had visited the case once. The patient, Agostine Spelzini, a boy of four and one-half years, was unconscious, and the sister stated there had been no change for a day or so, that the neck had been retracted, but was not so today. She also stated that the mother brought the boy into the city with her on Saturday, August 24th, and they both visited the macaroni factory, and after reaching home the boy was taken sick, headache, vomiting, no nasal discharge. They called the doctor, who reported the case to the Health Office on the 25th, and they were quarantined Monday, the 26th. Mother was not able to speak English. House and surroundings were very unsanitary. The sister, about sixteen years of age, said she had been working in Brownstein's overall factory before they were quarantined, but that the boy had

not been away or with other children, except the day they came into town. The patient was in a comatose condition, limbs were not completely paralyzed, although there seemed to be some paralysis of the throat.

Sept. 3rd, 1912.

To the Public Welfare Committee.

Los Angeles City Council,
Gentlemen:

Your committee of physicians appointed to investigate the situation relative to the existence of an epidemic of Poliomyelitis, beg to report:

We find that an epidemic has been present in this city and our investigation of thirty-seven cases under quarantine showed twenty-seven cases with definite, undoubted paralysis; that ten cases did not show paralysis at the time they were seen.

That the number of cases and the dates reported showed a rapid and alarming increase up to the time of the establishment of a rigid quarantine, since which time there has been a rapid decline in the number of new cases reported.

If this rate of decrease is maintained it will be but a short time before the epidemic is entirely wiped out.

Under the instruction of your committee asking us to ascertain the extent of the damage or crippling done to individuals by the paralysis, the work is of such magnitude that we are not ready to report at this time, but it is being pushed as rapidly as is consistent with a thorough investigation and the results will be placed in your hands at the earliest moment.

THE PHYSICIANS' INVESTIGATING COMMITTEE.

F. S. BARNARD, M.D., Chairman.
W. J. JETER, D.O., Secretary.

To the Public Welfare Committee of the
Los Angeles City Council.

Gentlemen:

Your committee of physicians appointed to investigate the epidemic of

acute Poliomyelitis (Infantile Paralysis) submit the following report of its contagious character and of its effect on the cases investigated:

As to its contagiousness, your committee, from the rapid spread of the disease after starting and the further fact of its rapid decline after the rigid quarantine established by the Health Department, are of the opinion that this disease follows the usual course of diseases accepted as contagious; that this phase of the disease has been under consideration by the Rockefeller Institute for Medical Research for several years past and they are as yet unable to arrive at any definite conclusions as to the means by which it is communicated from one person to another.

As to the damage done to the victims of this epidemic in Los Angeles, your committee has investigated two hundred and thirty-six (236) cases; there were twenty-two (22) cases that we were not able to see owing to their having moved away and there being no one who could give the necessary information.

Sanitary conditions do not seem to have much apparent influence on the disease as in our investigation, which covered the whole city, the disease was found where all surrounding home and sanitary conditions were excellent and in an atmosphere of intelligence; again where such conditions were far from good, poor homes, with most unsanitary surroundings and ignorance.

In about 75% of the cases a positive diagnosis of Acute Poliomyelitis could be made, the paralysis being or having been present in a greater or less degree.

In the remaining 25% there were not over 4% that could be called probable errors in diagnosis, the balance being of the abortive type or having completely recovered from the paralysis before being seen by competent observers.

The number of cases paralyzed was.. 173
The number of cases complete recovery 50

The number of cases partial recovery 123
The number of cases death..... 43
The number of cases not paralyzed... 46
Of the parts affected:—
The right arm was affected in...23 cases
The left arm was affected in...21 "
The right leg was affected in...32 "
The left leg was affected in...41 "
Both arms were affected in...11 "
Both legs were affected in...35 "
The face was affected in...19 "
The eyes were affected in..... 3 "
The trunk muscles were affected in 4 "
One side of the body was affected in10 "
The whole body, including the muscles of respiration, and causing death in.....43 "

In some of the cases above the parts affected might include an arm, a leg, and the face in a single individual. Any attempt to classify by an exact similarity of cases would make the list too long and would suit no purpose.

Partial recovery means any degree of improvement from slight to just short of normal or complete recovery.

In no case of those who lived was there one which did not show some improvement, a condition which is characteristic of the disease.

In not over ten per cent. of the cases was there so little improvement that a serious crippling might be feared.

The number permanently crippled can not be determined in so short a time.

The youngest person attacked was three months old.

The oldest person attacked was forty-two years old.

The average age of those attacked was four and one-half years old.

Respectfully submitted by your committee.

(Signed)

F. S. BARNARD, M.D., Chairman.

W. J. JETER, D.O., Secretary.

H. G. McNEILL, M.D.

S. S. SALISBURY, M.D.

G. M. GIFFEN, C.S.

C. H. MILLER, C.S.

J. PARK DOUGALL, M.D.

E. S. MERRILL, D.O.

L. J. HUFF, M.D.

A. O. CONRAD, M.D.

REPORT ON POLIOMYELITIS CASES
OUT OF QUARANTINE.

On September 7th Dr. Dougall, Mr. Giffen and a stenographer called on forty-five cases of Poliomyelitis now out of quarantine and beg to report as follows:

HUTTON, LUCILLE, No. 4736 Oakwood St. Four years of age. Found the primary symptoms were headache, fever, nausea, no vomiting. With a number of children the patient had spent the day at the beach, and shortly afterwards became ill. The lower limbs still showed signs of paralysis, unable to stand or walk, although able to flex the knees, if they were straight, but unable to bend them if limbs were apart. Soreness of joints still apparent.

SMITH, SADIE, No. 4922 Rosewood St. Twelve years of age. First symptoms on July 26th, pain in feet and limbs similar to rheumatism, no temperature for two days, third day temperature was 102 deg., stationary for two days, then very severe pains, increasing until limbs were paralyzed. Had nose bleed, vomited once, lost a great deal of weight, paralysis of right limb more marked. On Saturday before illness the patient had been to the beach with a number of children for the day. Condition at present, unable to walk, paralysis of limbs still present.

HEYLMAN, CHAS., No. 6126 Eleanor St. Nine years of age, symptoms very slight, only the deltoid muscle affected, recovery complete. The baby of three years who died on July 2nd had the usual primary symptoms, nose bleed, fever, vomiting, then complete paralysis. No other cases within two blocks.

HOPPER, MARGERITE, No. 1143 Vine St. Baby of sixteen months, both limbs paralyzed, usual primary symptoms, fever, vomiting, etc., then complete paralysis. Recently moved to this address from Hollywood. A child on the next street had died, supposedly from spinal meningitis a few days before the

patient became ill. Patient still partly paralyzed but improving.

STONE, WINIFRED, No. 1436 Iowa St. Age eighteen months, first symptoms, cried with pain in the head, fever, no vomiting, or constipation. Developed pneumonia after other symptoms were noticed. Temperature for a number of days 104 deg. The family had moved to this address just two weeks prior to the patient's illness. Slight paralysis still present on left side.

SMITH, MRS. MARY, No. 5326 Monticello St. Mother, twenty-eight years of age. Had very slight symptoms, stiffness of neck and joints. Recovery complete.

SMITH, WINIFRED, two and one-half years of age. Primary symptoms, no nasal discharge, but stiffness of neck, vomiting. This was the first one in the family to develop the trouble on July 8th; only trouble now is with the right foot.

SMITH, ROBERT, baby of one year, fever, crossed eyes, stiff neck. Recovery complete. Had spent the Fourth of July in Griffith Park.

VICKROY, ARNOLD, 5258 Sunset Blvd., 11 years old. First noticed illness on July 6th; felt ill in the early morning, temperature in the afternoon 103.4 deg. at 4 o'clock, no improvement next day, or a week later; symptoms seemed to resemble typhoid fever. After eight days' rigidity, stiffness of joints, also paralysis of right arm, and both legs; pains severe in knees. Primary symptoms, vomiting and headache. Condition now improving, able to stand alone, but muscles of limbs prevent walking steadily. Was not with or near other children, but was sick two weeks after school closed. Surroundings healthful and ideal.

MITCHELL, DAVY, No. 6100 Spring Dale Drive. Age five years. This patient was sick only a few days, headache, fever, etc., but was not paralyzed at any time; now well and strong.

McCURRAN, JOHN, No. 652 Imogen St. Boy of fourteen years, usual primary symptoms, paralysis of lower limbs, and left arm. Slight paralysis still apparent. Six others in family, none of the others troubled. Surroundings very bad, canvas-covered toilet, directly against a chicken yard; condition of the house not much better, five beds in one room; cook, eat and sleep in one room.

BREM, GWENDOLYN, No. 932 Maltman Ave. Four years of age, symptoms, vomiting, drowsiness, irritable, stiff neck, headache, intense pain, paralysis of both legs. Present condition improving but unable to stand alone or use legs.

BREM, THOMAS, twenty months old, became ill three days after sister's illness; very affectionate with sister. Symptoms, fever, vomiting, drowsy, but no paralysis at any time; doubtful if Infantile Paralysis. These are the children of Dr. Walter Brem, ideal surroundings, good air, and removed from other dwellings. The doctor had attended a case at No. 1600 W. 50th St., which had fever and drowsiness, and thought he might have carried the trouble, although the case mentioned did not develop any material trouble.

NOBLE, LOUIS, No. 848 Carillo St. Patient of four years; illness not noticed at first as patient had whooping cough, but fever, stiff neck and loss of speech for three days drew their attention to the actual condition, when a physician was called and quarantine imposed. All symptoms disappeared for a week, then reappeared; spasms during all of one night, constipation, fever, and all usual symptoms were present. Not near any other children. Recovery complete.

BRITTON, WM., No. 3223 Granada St. Fifteen months of age; no trouble of any kind except pain in leg. Very doubtful case. A neighbor phoned in the complaint to the Health Office. Patient was not sick at all.

KURKENDALL, EVELYN, No. 3442 Maceo St. Age four and one-half years. Pain in back of neck for two weeks, constipated. Almost entirely well, excepting one foot turns sideways.

PECK, PECHO, No. 827 Castellar St. Girl of three years had paralysis of legs, stiffness of neck; later developed pneumonia (probably caused by the use of an ice cap). Had spasms and quite a light temperature for a number of days. Did not know of any cause, except the patient ate raw turnips.

STOKES, BRICE, No. 453 Cottage Home. Age fifteen years; swollen feet and ankles, thought it was rheumatism, then had fever, constipation, rigidity and stiff neck, vomited once. Present condition improving, paralysis still apparent in left leg. Had worked in a laundry on Central avenue.

ROBERTS, JAS. ANDREW, formerly of No. 1440 Cypress Ave., now on San Fernando Road. Very light case, few of the usual primary symptoms, except partial paralysis of the entire left side. Complete recovery.

VOLKMAN, CURT, No. 1832 Pasadena Ave. Boy of three and one-half years. Mouth drawn to one side, vomited, constipated, pain in back of head, some nasal discharge, quite sick for a few days. Recovery complete. Had been going to a moving picture show on North Broadway.

ANDERSON, LESTER, No. 129 So. Ave. 20. Babe of nineteen months; first had fever, cried with pain in the head and back. Was feverish and sick for a month, during which time all the neighbor children played with the baby. They then moved to the above address from E. Ave. 39, and shortly after the patient's legs became paralyzed, then they were quarantined. Can stand on feet by being held, but cannot walk, legs very emaciated. None of the children which played with the baby during the period of fever developed any trouble.

LONG, LOUISE, No. 129 S. Ave. 24. Twelve years of age, had fever for a

couple of days, neighbors phoned in the complaint to the Health Office. None of the usual primary symptoms. Very doubtful case.

FOSTER, ETHEL, No. 3025 Baldwin St. Child of fifteen months, legs paralyzed, no fever, no nausea; condition now improving, but legs not strong yet. Children who played with the patient before quarantined did not contract the disease.

QUSKEEP, WILMA, No. 3319 Baldwin St. Two years of age, symptoms very similar to spinal meningitis. Retraction of head, muscles rigid. A physician was not called until the day before the death of the patient. Lived five days from first notice of symptoms. One of the first cases in the city.

WHITE, MARY, No. 4504 Ruby St. Three years of age. Patient was feverish for a few days and refused to take nourishment. No vomiting, no paralysis; was quarantined only a week. Very doubtful case.

DEACON, BERNADINE, No. 3716 Rolle St. Three years of age. Left hand and arm partly paralyzed, no other symptoms. Considerable improvement, entire use of hand and arm now.

ANDREW, NOBLE, No. 3736 Rolle St. Two years of age, was feverish for a week, nausea, no vomiting. Quarantined for twenty days, when diagnosis changed and quarantine removed.

MORRISON, JOSEPH A., No. 114½ S. Gates St. Age fifteen months, vomited, upper part of body paralyzed, retraction of head, fever, death within forty-eight hours.

MORRISON, ALBERTA (same address). Three years of age. Fever, no vomiting, paralysis of right arm; improving now. Mother took the children to a moving picture show on North Broadway frequently.

SCHWARTZ, ROBT., No. 2820 Altura St. Three and one-half years of age. Fever and vomiting for four days, pains all over body, constipation; stiffness of left knee. Baby of two years in the

family had the same symptoms. They had played with a neighbor child who had an abortive case.

LILLY, B., No. 536 East Ave. 28. Baby of fourteen months, fell and bruised cheek bone two weeks prior to any other symptoms. Vomited once, twitching of face still apparent. The physician on this case was very undecided about it. Doubtful.

DRISKELL, LOIS, No. 494 East Ave. 28. Two years of age. Had stiffness of joints, neck retracted, both legs paralyzed. Only paralysis now seemed to be in left leg. Had not been near other children for three weeks prior to illness.

HAYSON, HENRY, No. 705 No. Ave. 66. Three years of age. Fever not noticeable, vomited, stiff neck, but no nasal discharge. Lower limbs paralyzed from July 4th to August 12th. No bowel difficulty. Came here from Pomona. Five children in family, thirteen months to eleven years, none of whom were affected.

FARIES, VANDERBERG, No. 432 No. Ave. 56. This was one of the typical cases with all of the usual primary symptoms, retraction of head, complete paralysis, death in three days.

JUDSON, VIRGINIA, No. 225 South Ave. 66. Twenty-two months old, began to have fever July 2nd, no nasal discharge, no stiff neck, no trouble, no evidence of paralysis, lameness in left knee, still lame; sanitation fair.

BEAN, RICHARD, East end of Prospect Ave. Age two years. May have been sick for some time but no notice of same or history could be obtained. Convulsions, complete paralysis, death same day.

TAYLOR, A., No. 5901 York Blvd. Age five years, light case, slight paralysis left side. Complete recovery.

CUMMINGS, CHAS., No. 306 North Fremont. Age three years. May have been sick for some time but could not learn. Had convulsions, death same day.

as physician was called, August 4th, 1912.

HARRIS, HARRY, No. 821 Hinton Ave. Age five years, fairly typical case, left side slightly affected. Complete recovery.

CAVARIENTRA, JUAN, Poliomyelitis Hospital. Age three years, all of the usual primary symptoms, headache, nausea, vomiting. Complete paralysis left side and both legs. Retraction of head. Improving slowly, still troubled with laxness of muscles in legs.

NOBLE, WM. J., No. 1701 Kingsley Drive. Age twenty months, one of the first cases, neglected to call a physician until the day before the patient died. Had been sick a week. Symptoms similar to spinal meningitis, retraction of head, vomiting, nasal discharge. Paralysis the day before death occurred.

CASTRO, JESUS, No. 615 Lamar St. Age two years, Mexican family, in very unsanitary condition, family of eight, all living in one room; patient had usual symptoms, paralysis of lower limbs, complete paralysis before death, on twenty-sixth day.

ESPERSA, SALADA, No. 18 Lopez Court. Age two years, could not get any of the history except patient had convulsions, then became paralyzed and died within five days.

GALLOWAY, ROY, Douglas and Mendota Sts. Age four years, ill for some time before a physician was called. Usual symptoms, noticed marked drowsiness and stupidity, finally complete paralysis and coma the day before death. Lived twenty-eight days after illness began.

GREENWOOD, CLARENCE, No. 1133 Lillian Way. Age twenty-two months, symptoms similar to ordinary "summer complaint," so mother stated, relaxation of muscles, no stiffness for a day or two, then head became retracted, coma and death within five days.

JACKS, EDWARD W., No. 2237 Duane St., Edendale. Age three years, symptoms similar to typhoid fever for

two or three days, nose bleed, lack of appetite, drowsy. Called a physician on the fourth day after the patient had a convulsion. Patient died on fifth day.

Respectfully submitted,

J. P. DOUGALL,

G. W. GIFFEN.

SUMMARY.

Number of cases of Poliomyelitis visited	58
Typical cases	44
Doubtful cases	14
Cases without paralysis at any time	10
Cases remaining paralyzed after quarantine period	24
Fatal cases	13

PARALYSIS.

Face, right side	2
Limb, right lower	18
Limb, left lower	19
Limb, right upper	4
Limb, left upper	4
Right side	1
Left side	5
Body, upper	1
Aphasia	1
Optic paralysis	1
	56

Our investigation covered a wide range of the city. The disease was found where all surrounding home and sanitary conditions were excellent and in the atmosphere of intelligence; again where such conditions were far from good, poor homes, unsanitary surroundings and ignorance. As shown by our summary about 75 per cent. of the cases we investigated were pronounced and 25 per cent. of the total cases investigated were quite doubtful.

In no case was evidence forthcoming that would enable us to form the conclusion that the disease is either infectious or contagious. Where the opinion prevailed with parents or home people that the disease was communicable, close questioning could elicit no definite, conclusive or even tenable proof, merely conjecture. In a number of instances the evidence was conclusive that the disease had not been communicated, although other children had caressed and played with patients while the fever period was in evidence, also both before and after.

This leaves the question of communicability in doubt, in so far as contagion or

infection, either by direct transference from one person to another or through the medium of articles of clothing or anything that may have been in possession of an infected child.

Peculiarly there seemed to be some evidence in a few cases that an adult had been the intermediary. The great diversity apparent in the symptomatology, together with the same condition in the distribution of the paralyses has been a barrier to an equitable and systematic classification of the cases that have been examined by your committee.

BUBONIC PLAGUE.

As an example of the pernicious effect of the subordination of health interests to financial, Senator Owen cites the incident of bubonic plague in California:

The most dangerous epidemic known to the world has been the bubonic plague, a germ disease capable almost of explosive epidemic. "After an incubation of from four to seven days with headache, vertigo, and mental depression there comes a chill, a raging fever, great prostration, occasional vomiting of bile and blood; the glands of the neck, under the arms, at the elbows, in the groin, under the knees, all over the body, become red and swollen, tender, and extremely painful. They turn dark, become filled with pus. If not opened, burst spontaneously. The disease is sometimes attended with abscesses, boils, and carbuncles. About this time the agony of life and the sting of death are both overcome by a merciful unconsciousness," and the mass of putrid flesh ceases to breathe and the heart is stilled."

This was the "black death" of London, killing about 70,000 people with incredible speed—a thousand dying a day. At Marseilles 87,000 died; 200,000 in Moscow.

It is the most dreaded and dangerous of all international epidemics. In the Bombay outbreak, of 200,000 cases, 164,000 deaths occurred. It is a disease which infests rats, squirrels, rabbits, and all animals that carry fleas, and large areas may be infected before the human form violently develops. It is the first disease mentioned in international sanitary agreements.

When the bubonic plague broke out in San Francisco in 1900 the city board of health of San Francisco quarantined the Chinese district. The United States circuit judge, on June 15, 1900, influenced by the commercial spirit of San Francisco, declared the city quarantine illegal, gratuitously observing: "If it were within the province of this court to decide the point, I should hold that there is not now and never has been a case of plague in this city."

If this high authority (?) on bubonic plague should also have decided, "If it

were within the province of his court to decide the point, I should hold that there never would be a case in San Francisco," his judgment in the one case would be as illuminating as in the other.

Bubonic plague was then (1900) in the city. It is now scattered over the Pacific coast at points a thousand miles apart, and is requiring enormous sums of money to stamp it out, but is now endemic and spreading through the infection of ground squirrels and rats, which continually infect each other and spread the germs of the disease over enlarging areas and at any time may break out in our thickly congested centers with tragic results that may stagger the Nation.

This opinion of the United States circuit judge (1900) was followed with an immediate Federal quarantine of the State of California, which was the duty of the Government officers in charge under the obligation of the United States to the several States of the Union and to the nations of the world. The Marine-Hospital Service officials declared this quarantine.

The governor of California and the commercial bodies of San Francisco immediately suppressed the Marine-Hospital Service through the Secretary of the Treasury, compelled the Surgeon General to yield, proved a false case, and made it temporarily stand as the truth before the country. They furnished evidence and proved that there was no bubonic plague in San Francisco, notwithstanding the fact that bubonic plague was there in sober truth. In any other State the same thing, in all human probability, would have occurred, for men act alike under like temptation.

The Marine-Hospital Service finally persuaded the Secretary of the Interior to cause an inquiry in January, 1901, through experts of the highest class, Prof. Simon Flexner, of the University of Pennsylvania; Prof. F. G. Novy, University of Michigan; Prof. L. F. Barker, University of Chicago. This unanswerable authoritative report was made on February 26, 1901, finding numerous cases of bubonic plague in the heart of San Francisco. The United States quarantine law of February 15, 1893 (sec. 4, Stats., 451), required its immediate publication. I am advised that it was suppressed until April 19, 1901, and until it had been given publicity by the Occidental Medical Times and the Sacramento Bee.

Again the commercial interests of San Francisco had triumphed over the bureau and compelled the Surgeon-General, the head of the bureau, by an order of his superior officer, the Secretary of the Treasury, to agree to suppress this report, contrary to the obvious moral and sanitary duty of the United States. From that time bubonic plague has widened the area of its terribly dangerous infection from Los Angeles to Seattle, passing from rat to rat and squirrel to squirrel and from these animals to an occasional human being through the agency of the common flea. Various experts of the Marine-Hospital Service, who immediately after the report of 1901 discovered the infection outside of San Francisco and reported the truth, were by some strange fatality

shortly after their several reports removed from such duty faithfully performed and sent to the ends of the world—to Honolulu, to Ecuador, etc. The reward of their faithful service seems to have been a humiliating removal at the demand of their commercial opponents. It is a most interesting history, the details of which might with propriety be given to the Senate as showing the destructive power commercial interests can exert over the faithful servants of a subordinate bureau. The Secretary of the Treasury was not selected as a Cabinet officer because of his knowledge of the public health, but because he was an expert on finance. At present our Cabinet expert of finance directs government activities in controlling bubonic plague, and the board of trade and a few commercialized physicians of San Francisco would be more important in his eyes in all human probability than the chief of one of his subordinate bureaus; at all events this was true as to a previous Secretary.

The point I wish to emphasize is that the bureau dealing with public health was easily suppressed by commercialism and its supposed interests (putting in jeopardy the national health, the national honor, and the national treasury), and required to withhold and suppress the truth in violation of section 4 of the quarantine laws of the United States.

AHEM!

LOS ANGELES, CAL., Sept. 14, 1912.

Editor, Southern California Practitioner,
500 Auditorium Bldg., City.

DEAR SIR:—Enclosed find copy of a letter which we are sending to all of our members.

We would appreciate a reproduction of it in the columns of your journal.

Very truly yours,

Southern California Branch

THE NATIONAL LEAGUE FOR MEDICAL
FREEDOM,

Florence W. Saunders,

Asst. Secretary Local Committee.

LOS ANGELES, CAL., Sept. 14, 1912.

DEAR FRIEND:—For two years The National League for Medical Freedom has prosecuted a vigorous campaign of education. Mass meetings have been held, thousands of articles and editorials dealing with the aims and purposes of the organization and the measures it has been opposing have appeared in the press, and millions of pieces of literature have been distributed.

As a result of the effective agitation carried on, the public mind has been fully awakened to the menace of mo-

nopolistic medical legislation. Besides its educational work The National League for Medical Freedom has been able to defeat in Congress and in the State legislatures many obnoxious bills. The work of the past twenty-four months has amply demonstrated the fact that the people as a whole believe in and will support the cause of medical freedom.

The various groups and organizations of Southern California that oppose monopolistic medical legislation have been brought into sympathetic relationship and understanding and together have achieved many brilliant victories but the time has come when in the opinion of the local committee of the Southern California Branch, the cause of medical freedom in Southern California can be best served and carried forward to greater victory, by the individual schools of healing and other groups opposed to medical monopoly, rather than by their continued amalgamation.

Having brought its propaganda to such a successful issue it is believed that the work of The National League for Medical Freedom in Southern California is finished and that the best interests of the cause of medical freedom demand the discontinuance of the Southern California Headquarters. Accordingly, the Local Committee on September 10th passed a resolution to disband the Southern California Branch of The National League for Medical Freedom on September 30th, 1912.

At the same time the committee passed a further resolution that the members of the Southern California Branch be notified that no moneys for monthly pledges be received after September 30, 1912, and that monthly pledges paid in advance of October 1st, be refunded; the balance of funds on hand after the liquidation of all liabilities to be forwarded to the national headquarters of The National League for Medical Freedom at New York.

When all moneys have been disbursed, the accounts will be audited by a well-known firm of public accountants and a copy sent to each contributing member.

The Southern California Branch of The National League for Medical Freedom may congratulate itself upon the far-reaching and permanent results of its two years' history. It is safe to say that seldom, if ever, has an organization accomplished so much of an enduring character in so short a time. The work of medical freedom will now be carried on with greater energy and increasing success by the various groups and schools of healing. These armies acting independently, but with a common purpose and spirit can push the battle with greater promise than could any centralized organization. Thus shall the cause of medical freedom prosper until the menace of medical tyranny shall be forever destroyed.

We take this occasion to thank you heartily for your support during the past two years.

Sincerely yours,

The Local Committee of the Southern
California Branch

THE NATIONAL LEAGUE FOR MEDICAL
FREEDOM.

308 Homer Laughlin Bldg.,

Los Angeles, Cal.

(Who compose these "various groups
and schools of healing"?—Editor.)

CALIFORNIA'S FIRST DOCTOR.

An interesting article on this subject, by John Steven McGroarty, appears in this month's *West Coast Magazine*. The story is told of Pedro Prat, California's first doctor, a member of the expedition of 1769 which came to Christianize and civilize the natives of California. Dr. Prat was early confronted by a serious epidemic of scurvy. To make his plight more terrible, his supply of medicine ran out. To meet the exigencies, the doctor gathered quantities of mustard leaves, which he used as spinach for his patients to eat. He also made use of the wild

horseradish, water cress and what is known as "scurvy grass." For nearly a year he labored unceasingly among the sick at San Diego. Later Dr. Pedro Prat accompanied the expedition of Don Gaspar de Portola to Monterey. Here the doctor was busily engaged in his profession for several months, when his mind gave way. For a whole year the people of Monterey tenderly watched and nursed Dr. Prat, hoping for his recovery. But it was at last seen that his case was hopeless in their care. Consequently, the sufferer was shipped to the hospital at Guadalajara, where he passed away a few weeks later. The writer closes the narrative with the following paragraph, which we heartily endorse:—

"Not only because he was California's first doctor, but also because he was so faithful to his calling, so unselfish in his sacrifices, I think it would be a fine and a gracious deed for the physicians of California to erect a monument to his memory."

RULES FOR THE MANAGEMENT OF POLIOMYELITIS.

BY THE CALIFORNIA STATE BOARD
OF HEALTH.

1. Acute poliomyelitis should be regarded as an infectious disease and quarantined accordingly.

2. The period of quarantine shall be thirty days, dating from the onset of the disease.

3. Premises shall be placarded as in other quarantinable diseases.

4. No persons, other than doctor, nurse or clergyman, who shall come in contact with sick, shall enter or leave the premises.

5. Contacts and suspects shall be kept under observation for twenty-one days.

6. Cases must be reported to the local sanitary authority and by it to the State Board of Health. Every effort should be made to trace possible means of communication, especially when the disease first occurs in any locality. Use federal blanks obtainable from State Board of Health.

7. The same precautions should be taken in the care and management of poliomyelitis as in the cases of other infectious diseases, of which scarlet fever is suggested as the type.

8. Special attention should be given to discharges from the nose and mouth. These should be caught upon material that can be burned or in vessels containing a disinfecting solution. Urine and feces should be sterilized before being placed in closets.

9. Domestic animals should be rigidly excluded from the sick room and from all infected premises.

10. Before release from quarantine, the patient's and attendant's clothing and premises must be disinfected in accordance with standard methods.

11. In the presence of an epidemic, it is wise to forbid the congregating and assembling in any manner of children under fifteen years of age.

12. Where the disease is prevalent, it is a safe precaution, where possible, to keep children strictly confined to their own premises, and in every case to avoid entrance of contacts.

Adopted September 7th, 1912.

RESOLUTION PLACING POLIOMYELITIS ON THE LIST OF QUARANTINABLE DISEASES.

Whereas, Poliomyelitis has been shown to be epidemic in certain sections of California,

Resolved, That, in the the opinion of the State Board of Health, poliomyelitis be and it is hereby added to the list of quarantinable diseases mentioned in Rule 1, Sec. 13, of an act entitled "An Act to amend Sections 2, 3, 13 and 21, of an act entitled 'An Act for the preservation of the public health of the people of California, and empowering the State Board of Health to enforce its provisions, and providing penalties for the violation thereof,' approved March 23, 1907," such action being necessary for the protection of the public health.

Adopted September 7, 1912.

RESOLUTION GOVERNING RELEASE FROM QUARANTINE IN EPIDEMICS OF POLIOMYELITIS.

Whereas, Poliomyelitis has been declared to be epidemic in certain sections of California; and

Whereas, Said disease has been placed on the list of quarantinable diseases;

Resolved, That in any section where the disease appears the rules adopted by the State Board of Health September 7th, 1912, governing poliomyelitis, be immediately put in force in that community. Be it further

Resolved, That whenever, in the judgment of the local board of health, the precautions enjoined under Rules 11 and 12 are no longer necessary, such board shall pass a resolution stating that the disease is not now epidemic and that such precautions may be relaxed, and forward same, with a statement of the facts, to the State Board of Health for approval.

Adopted September 7, 1912.

ADVERTISEMENT.

SCIENTIFIC MANIPULATIVE THERAPEUTICS.

To the Medical Profession: The undersigned respectfully solicits cases needing such treatment assuring you of conscientious work with faithful conservation of *your* interest in the patient.

A. EDWARDES, 603 Exchange Bldg., F 2762.

ADVERTISEMENT.

For the benefit of physicians in this city feeling the need of a speaking knowledge of Spanish, there is being started a Conversational Spanish class by Miss Martina Case of Chihuahua, Mexico. The term of lessons will cover 15 weeks, to meet two evenings a week in a central location. Those desiring further information may address Miss Martina Case, 211 E. Lime Ave., Monrovia.

“THE FORLORN HOPE.”

NOBLE WORK OF MEDICAL PROFESSION.
LORD ROSEBERRY'S EULOGY.

Lord Rosebery, Chancellor of the University of London, delivered one of his characteristic, racy speeches while distributing the prizes at the London Hospital and Medical College. He spoke of the medical profession as the noblest, and the speech throughout sparkled with deft little touches.

People of my generation (his Lordship said) know very little about medical students and what they did know was all wrong. (Laughter.) We were brought up on *Pickwick*, and I expect a dull groan to proceed from this assembly when I recall to them the manner of students who were depicted in that immortal work. We grew up to manhood under the impression that medical students were composed of people like Mr. Bob Sawyer and Mr. Benjamin Allen, who are, I think, the vilest specimens of the human race that even fiction represents to us. (Laughter.) I myself do not believe that they, or anything like them, ever existed. I think our immortal humorist took some germ of medical students of that time and expanded it, until it became those two horrible blackguards that we recall. I think, indeed, that he produced them as antediluvian animals for the classical inspection of the great peripatetic philosopher, Mr. *Pickwick*. (Laughter.)

THE OLD APOTHECARY.

Then, there were other members of the medical profession who then existed, and I fancy they still survive in the more rural parts of the country—I mean the apothecary of our childhood. He was a great medicine man, as the Indians call them, in the most literal sense of the word, because he not merely recommended, but compounded, the medicines which he duly administered. He changed his name. He gave up the good old name of apothecary, and became the general practitioner, to our lasting regret. I do not know why, because you never read of

the general practitioner in “*Romeo and Juliet*,” and you may see the whole method of his transition recorded by one of our great writers of fiction in the character of Mr. Pendennis, the father of the hero of that romance. Well, he was a kindly friend to us. If he gave us too much medicine, there was no necessity to take it—(laughter)—and I do not think we always did. (Laughter.) I can still remember the familiar grasp of his warm and flabby hand as it rested upon my tremulous pulse. Well, I suppose this is an age of progress, and we must dispense with him as well as with other familiar features of the past.

“A FOOL OR A PHYSICIAN.”

There is a proverb which says that every man by forty is either a fool or a physician, which means, I suppose, that by the age of forty every man knows what suits his constitution, and goes and diets himself accordingly. Well, I certainly am not a physician, and I have passed the age of forty; but I am also very unwilling to impale myself on the other horn of the dilemma. (Laughter.) I comfort myself by thinking that if everybody who does not know and practice what is best for his health at the age of forty is a fool, almost all the celebrities of history have been fools as well, beginning with Alexander the Great and going on with a great many other Greats, such as Frederick and Peter and so forth. Certainly they neither knew nor practiced what was good and best for them.

But whether we are fools or not, at any rate we are not so foolish when we have passed the age of forty as to try to discourse on matters beyond our comprehension to those who know them much better than we do. But this I will say, that every sensible man who is past the age of forty—if he be not a physician—is not such a fool as not to wish that he were a physician. That is beyond the compass of most of us, because the physician, like the poet, is born and afterwards made here. The great physician

must have the intuition and the instinct of his profession born with him.

FORLORN HOPE OF HUMANITY.

After all, it is the noblest secular profession in the world. It is the one and only profession, the one and only secular profession, which tries wherever it goes unselfishly, willingly, earnestly to give comfort and alleviation to all the human ills. It is, I think, the noblest profession, because it is the forlorn hope of humanity itself—(cheers)—the forlorn hope because it never can hope to conquer in the long run, yet it never despairs, and is always seeking new inspiration and new strength for the battle, which can only have one termination. It is a forlorn hope because it combats the reptile of disease, from which you may be successful in cutting off a limb, yet on which, like the fabled dragons of old, another new limb springs up to take its place. It is a forlorn hope because even when you have surmounted and conquered one form of disease another form, a new form, such as sleeping sickness, is sure to spring up in its place.

It is a forlorn hope, because all day and every minute of your career you are fighting with the Angel of Death, which must inevitably defeat you in the end. That may seem a gloomy view to take of the medical profession. I do not think that it is, for you are fighting the most heroic fight that is going on in the world—fighting not for your own selfish interests, but for the cause of humanity itself. (Cheers.) Take one single name from your profession. Take the name of Lister—(cheers)—and balance against that name all those great historical figures which have devoted their lives and their energies to conquest and to bloodshed. Put them all in one side of the balance and the name of Lister in the other, and does any intelligent human being hesitate as to which the universal gratitude of mankind is due?

Note: This clipping from a Scottish newspaper was sent us by that doughty Scot, Dr. Wellwood Murray, Palm Springs Riverside County—Editor.

DIVISION OF FEES.

Pasadena, Cal., Aug. 9, 1912.

To the Editor of the So. Cal. Med. Practitioner:

Dear Sir:

A number of physicians have written to me as president of the Southern California Dental Association, inclosing a circular letter received by them which contained the suggestion, that if patients were referred to the sender for orthodontia treatment a proportion of the fees would be given to the physician so doing; and I have been asked quite pointedly if this mode of action accords with the ideas of ethics accepted among dentists. For the information of all who may have received these or similar circulars I will say emphatically that it is not. To make the ethical rule still better understood it is proposed to adopt the same resolution at the next meeting which the Medical Society adopted not long ago with reference to the division of fees.

It is believed by all ethical dentists that a man is entitled simply to what he earns—to what he works for, and that anything which represents a "commission" is non-professional—not even respectably commercial.

Yours truly,

GARRETT NEWKIRK.

Gen. George M. Sternberg says: "It is hardly necessary to insist further upon the importance of the interests involved. Can anyone contend that the sanitary interests of the people are less important than their commercial or their educational interests? Or is there any good reason why the general government should not recognize those interests by establishing a Department of Public Health and placing a Cabinet officer at the head of it?"

Dr. C. L. Dana, formerly president of the New York Academy of Medicine, says: "We may say that in the last 25 years the ratio of insane to sane has shown an apparent gradual increase from 1 to 450 to 1 to 300."

THERAPEUTICAL HINTS

The Denver Chemical Mfg. Co., manufacturers of Antiphlogistine, are to be congratulated on securing the services of Mr. Harold B. Scott as manager of the company, to succeed J. C. Bradley, who is retiring from that position.

Mr. Scott is a bright, energetic young man, a graduate of Yale University with the degree of A.B. Upon his graduation from college he entered the commercial world where he has enjoyed a wide, varied and successful experience in developing one of the great industries of our country. He is peculiarly well fitted for the management of a proprietary house, and his connection with Antiphlogistine will doubtless lead the Denver Chemical Mfg. Co. to spell success with larger letters than ever before.

THE CHLOROSIS OF YOUNG GIRLS.

To permit the blood stream of chlorotic girls to remain in an impoverished state, is to expose them to more than one peril. Such patients are usually high-school or seminary girls, struggling with duties that tax their every ounce of force. When the break comes, as it almost inevitably will, the physician has on his hands a girl whose recovery takes much time and care. In most instances this could be avoided were the girl put on Cordial of the Extract of Cod Liver Oil Compound (Hagee).

As a blood-maker and general tissue builder, it is of much value in chlorosis. Not only are the blood corpuscular elements increased in number, but also a noticeable improvement takes place in their quality. Cord. Ex. Ol. Morrhuæ Comp. (Hagee) will prove its merit in these cases and its systematic administration over a considerable period of time will save chlorotic girls much of the distress to which they otherwise would be subjected.

THE CONTROL OF PAIN.

The work of the conscientious physician is many sided and diverse, but no part or detail of his manifold duties is ever more obligatory or imperative than the control of pain. In the presence of physical suffering any other consideration than its prompt and positive relief, with rare exception, becomes of secondary importance. But insistent and pronounced as the physician's duty always is to control and assuage the pains to which human flesh is subject, it should ever be his aim to accomplish this noble purpose in the best, as well as in the quickest possible way. Otherwise, with regard only for a patient's comfort, it is extremely liable that the agencies of relief will be attended by consequences serious in the extreme and not infrequently more harmful in effect than the original pain itself.

The foregoing has particular significance for the cautious physician, inasmuch as he has in Papine a pain-relieving measure that enables him to control pain promptly and effectively, with the least possible untoward action. Representing as it does all the anodyne properties of the most potent opiate, but with the usual objectionable features reduced to a minimum, Papine is undoubtedly the most efficient analgesic at the command of the profession. Compared with the useful opiate, Papine will be found much more free from those disagreeable effects ordinarily considered inseparable from preparations of opium, such as constipation, nausea, gastro-intestinal derangement, and tendencies toward habit formation. Thus it can be employed in a wide variety of conditions with confidence, not alone in its anodyne and sedative action, but equally in its avoidance of disagreeable or unpleasant by-effects. In brief, Papine is the ideal preparation of opium, presenting all the advantages of this well-nigh indispensable

Colden's

Liquid

Beef

Tonic

It so sharpens the appetite, and is so effective when employed in the various forms of indigestion resulting from deficient digestive secretions and from gastro-intestinal inactivity, that it is commended by physicians who have prescribed it in such cases.

It has been found no less reliable and helpful during convalescent periods and in overcoming certain of the consequences of old age. When Anæmia is a complication, Colden's Liquid Beef Tonic with Iron is indicated.

Sold by druggists.

Sample with literature sent to physicians on request.

THE CHARLES N. CRITTENTON CO., 115 FULTON ST., NEW YORK

ble drug with its nauseating, constipating and habit-forming tendencies reduced to a minimum. Innumerable physicians use it to the exclusion of all other opiates since it enables them to secure all of the well-known benefits of the most potent opium derivative—with gratifying freedom from the usual disadvantages.

New York, September 1st, 1912.

Gentlemen:—The Pharmaceutical Department of this Company has this day taken over the importation and sale of the Modern Medicinal Preparations of the **Farbwerke, vormals Meister Lucius & Bruening, Hoechst-on-Main, Germany**, for which **Victor Koechl & Co.**, and their immediate predecessors have been the American Agents for the past forty years. The purpose of the change is to identify the name of **Farbwerke**,

vormals Meister Lucius & Bruening more closely with their products. The management of the **Pharmaceutical Department of the Farbwerke-Hoechst Company** will be the same as that of **Victor Koechl & Co.**, so that the change is practically one in name only. We hope for a continuation of the good will and interest shown towards our products in the past. Yours truly,
FARBWERKE-HOECHST COMPANY,
H. A. Metz, President.

Dr. Wiley says: "Every time you die before your time, and you do it but once, either someone has killed you or you have committed suicide. Nature did not intend man to die by disease, and yet almost everyone dies before his time because you and the State have not looked out for your health."

ADVERTISEMENT.

Svapnia

**Purified Opium
With a Fixed
Morphine Standard**

SVAPNIA possesses the following advantages over ordinary opium:

Freedom from mechanical impurities; elimination of undesirable alkaloids; definite morphine content (10 per cent); lessened tendency to nausea and vomiting; increased palatability; uniform results.

The adult dose of Svapnia (1 to 2 gr.), as well as the indications for its use, are the same as opium. It is in the form of red-brown scales, soluble in water with turbidity, and is best administered in capsules, pills or powder form.

Sold by druggists generally.

THE CHARLES N. CRITTENTON CO.

Sole Distributing Agents,
115 Fulton Street, New York.

Sample and literature on application.

CHARITY: The best form of giving must always, I think, be that from person to person. Would that it were more used—would that those whose feelings are stirred by the sight of many sick folk were content to try and heal one! There are always individuals in need at our own door—neighbors, workpeople, relatives, servants; there is always among those we know someone whose home could be made brighter, or whose sickness could be lightened; there are tired people who could be sent on holiday, boys or girls who could be better educated. Gifts which pass from person to person are something more than ordinary gifts. "The gift without the giver is bare," and when the giver's thought makes itself felt, the gift is enriched. The best form of charity, therefore, is personal.

To the disappointment of Queen Mary, the Prince of Wales did not add much to his knowledge of French during his stay in Paris. He is not a particularly brilliant youth, though amiable, and he has always been slow at languages.

He did not talk as much French as it was hoped he would while on his visits and in one other respect he proved something of a trial to his hosts. He is quite devoid of a sense of humor and the cleverest of French wit even when carefully translated for his benefit failed to appeal to him.

He very often smiles at a joke from sheer good nature, but he almost never laughs because he never sees the point and he is for that reason a source of amusement to his brother Albert, who is the only one of the royal children with a well-developed sense of humor. Queen Mary also takes life very seriously. King George, on the other hand, is easily moved to laughter.

Queen Victoria and Queen Alexandra were notably deficient in humor, but King Edward loved a good story or joke and his favorite friends were almost always those who most amused him.

Dr. William A. Evans, formerly Commissioner of Health of Chicago, announces through circular letters to members of the medical profession that he has been placed in charge of the Health Department of the Chicago Tribune. The idea of this new departure is to have the department in charge of an expert competent to place before the public correct information on public and private hygiene. Thereby, health departments will be helped to secure measures calculated to be of public benefit and the people will be taught what to do and what not to do if they are to escape preventable illness.

SOUTHERN CALIFORNIA PRACTITIONER

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LOS ANGELES, NOVEMBER, 1912.

No. 11

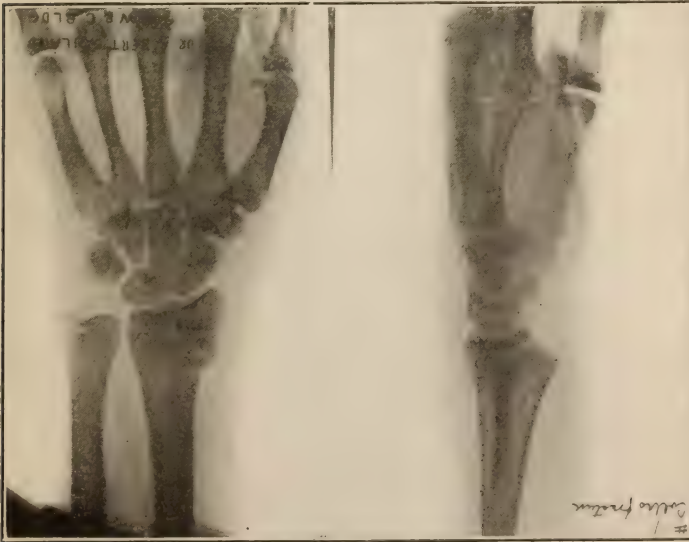
Editor,
DR. GEO. E. MALSBARY.

Associate Editors,

Dr. Walter Lindley, Dr. W. W. Watkins, Dr. Elbert Wing, Dr. Ross Moore, Dr. George L. Cole, Dr. Cecil E. Reynolds, Dr. William A. Edwards, Dr. Kaspar Pischel, Dr. Andrew W. Morton, Dr. H. D'Arcy Power, Dr. William W. Roblee, Dr. B. J. O'Neill, Dr. Otto G. Wicherski, Dr. C. G. Stivers.

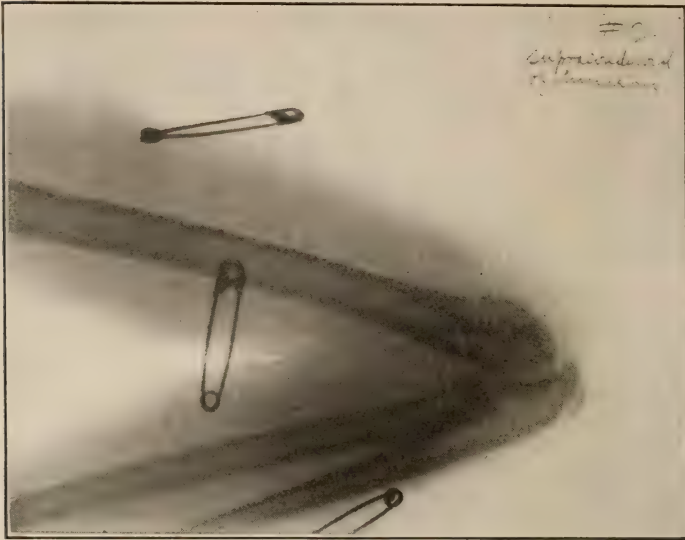
RÖNTGEN INTERPRETATION OF A FEW COMMON TYPE FRACTURES.*

ALBERT SOILAND, M.D., LOS ANGELES.

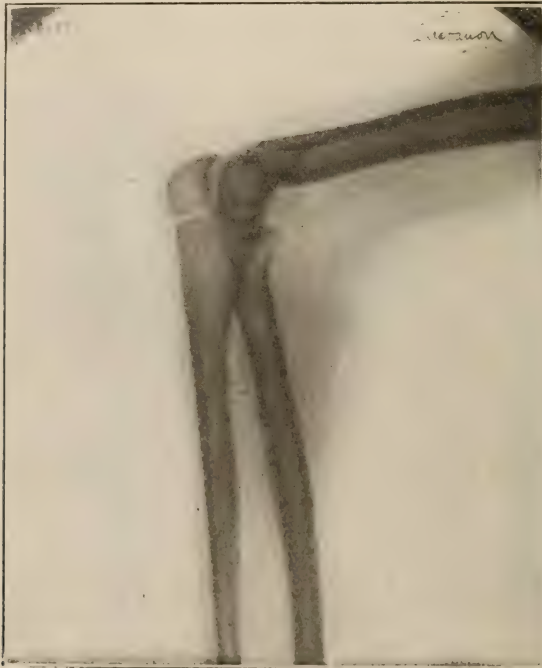


1—Colles fracture, both bones broken at Epiphysial junction.

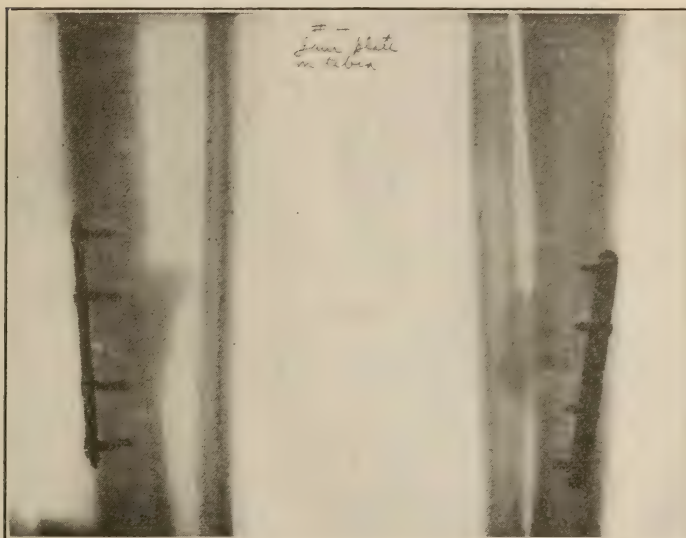
*Presented before the Los Angeles County Medical Association, October 18, 1912.



2—Supracondyloid fracture of Humerus at point of election, or most frequent point of fracture. Note perfect apposition of fragments obtained by acute flexion.



3—Simple fracture of Olecranon with good approximation in right angle flexion. This fracture is usually dressed in full extension.



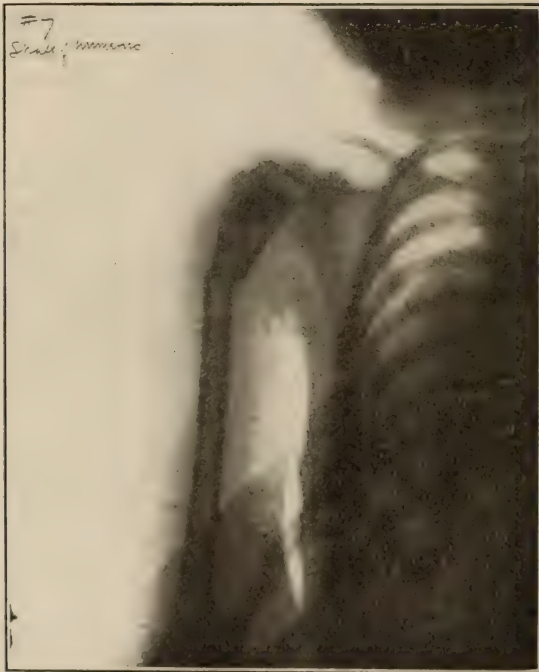
4—Transverse fracture of Tibia, showing satisfactory results obtained with Lane plate.



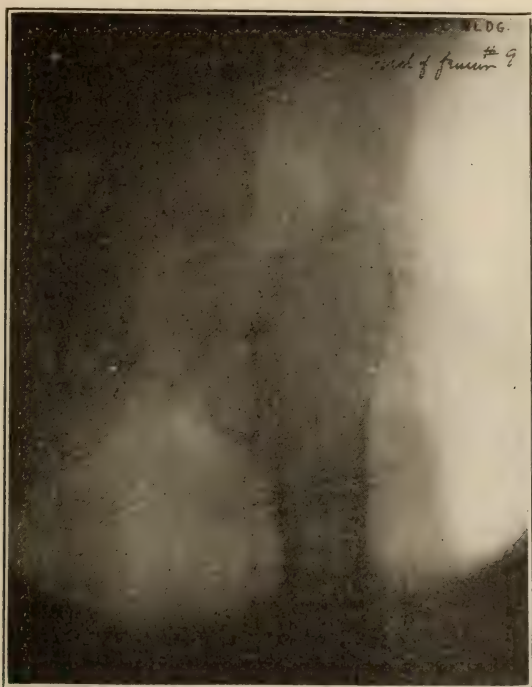
5—Potts fracture, both bones involved, union with good function.



6—Common type of fracture. Neck of Humerus with usual inward displacement of lower fragment.



7—Less common fracture of Humeral shaft. Note outward inclined angle of fragments.



8—Fracture of Femoral neck along Trochanteric line. In this instance no destruction of neck of bone.



9—Classical intracapsular fracture neck of Femur with absorption of bone. This is typical of nearly all fractures in this region.

TREATMENT OF FRACTURES.*

BY C. H. WHITMAN, M.D., SUPERINTENDENT LOS ANGELES COUNTY HOSPITAL, LOS ANGELES.

The treatment of fractures is one of the oldest procedures employed in the practice of surgery. In the days before the X-ray was known, there was no advancement possible beyond the line laid down during centuries of practice. Within the last 20 years more scientific methods of procedure have been advised, but to the present day the older lines of treatment have been adhered to. The subject has recently received special attention and articles have appeared prominently in medical journals, some advocating the open treatment and others of them denouncing the practice, claiming that the results obtained by the older methods are fully as good, if not better than, the results obtained by using the new.

Mr. Lane, of London, is a staunch advocate of the open operative treatment for recent fractures. He claims and has proven that the results following the treatment of fractures, and particularly of the long bones have not been as good by the old method as the general impression would lead one to believe.

Aside from the question of non-union fractures, a faulty union may hamper the patient to the extent of partially incapacitating him for work, and his wage earning efficiency and general usefulness to the community will be consequently reduced.

Mr. Dent, surgeon to the Metropolitan police force of London, quotes the end-results following fractures of the leg and thigh are as follows: "Recovery from the point of view of the surgeon and that of the patient does not always agree. The standard of efficiency is high in the police force, which is the class of men principally under

consideration. The work demands fair activity; thus for two periods of two hours or for one tour of eight hours a man must be continuously on his legs day after day, though with frequent short spells of leave. Judged by this statement and desirous of keeping well within the mark, my estimate is that at least 30 per cent fail to attain this standard after simple fracture of both bones of the leg. I can hardly recall a case of Pott's fracture where recovery has been complete enough to enable these men to resume work."

Speaking from a vast experience with recent fractures, Mr. Lane says: "It may be that in some few cases of simple fracture, nonunion results from some cause which could not be obviated by proper treatment, but I have never come across one instance in which union would not have resulted if sufficient operative measures had been adopted, though a very large number have come under my observation."

Mr. Lane shows by numerous X-ray cuts in his treatise on "Operative Treatment of Fractures" how his cases, with the aid of the metal splint, attained perfect anatomical and functional result. By looking at the plates alone, one could have no doubt as to the correctness of his views. It is the general impression that he advocates the open treatment in all cases. This is not according to the statement made by him in 1908, in which he says: "For thirteen years I have made it my habitual practice to operate all cases of simple fracture of the long bones in which I was not able to obtain accurate apposition of fragments when the restoration of the bone to its normal form was of mechanical importance to the individual." This condition can always be

*Read before the Los Angeles County Medical Association, October 18, 1912.

readily determined by an X-ray plate before and after attempted reduction.

In France, Dr. Lucas Championnier has long advocated his method of massage and early passive movement, but there is no reason why this method should lead to a better adjustment of the fragments. The irritation thus produced might possibly lead to more formation of callus and stronger though faulty union, often partially incapacitating an individual and so preventing him from again attaining wage-earning efficiency.

Special types of fractures cannot be taken up in this paper. The fracture of long bones is more often spiral or oblique than transverse, and the apposition of the surfaces is more difficult. It is often impossible to restore the axes of these fragments by the conservative method, and union with axes of these fragments not in line will mean that the weight transmitted through this faulty union will cause annoyance of a varying severity. It may be the cause of an arthritis and mechanical change in the joint surfaces.

The older the individual the more liable is this to occur. It has been shown that in children nature comes to the assistance by gradually (covering a period of three or four years) completely replacing the old deformed shaft with a new one, transferring the force transmitted naturally by the bone in one axis instead of two, which must be done if there is an angulation of the shaft.

Perhaps one of the commonest forms of fractures encountered is the Pott's fracture. The break is produced by an eversion of the foot and the result may be merely a fracture of the fibula and a tearing of the internal lateral ligament, or the internal malleolus of the tibia may be broken off. The deformity produced varies in degree, and displacement backwards may occur, making the reduction decidedly difficult. The result here is important, and far

too often the treatment by the conservative method yields a deformed ankle, which is painful to the patient. Obstinate flat-foot may follow, due to the tibialis posticus tendon being displaced, so depriving the arch of its normal support. This tendon can be replaced to its normal position and the bone fragments accurately coapted only by the open treatment. As has been previously mentioned, Mr. Dent stated that he could hardly recall that a patient sustaining a Pott's fracture had ever been able to resume his duties on the London police force. This being the case, how important it is that we should resort to some method which will restore to our patients a limb which will functionate normally.

In advocating operative treatment of simple fractures, one should consider that existing circumstances and surroundings must determine the procedure to be followed. Strict asepsis is at all times necessary. Therefore, operative procedures on fractures should be done only when we are assured of surgical technic which is of the best and safest. The general feeling is that simple fractures had best be treated by fixation according to old methods rather than by the open method when there is a chance for infection. A tedious and longer convalescence will certainly follow if the wound becomes infected. Bruised tissues are much more susceptible to infection than healthy ones and perhaps even more so than the peritoneum would be. Henderson says compound fractures would perhaps best be operated upon, as they are of a type which will be slower in healing, though they generally unite, and will need more careful and accurate fixation.

Beckman of Rochester classifies the cases for the open operation as follows: Fractures in which the deformity cannot be reduced and the fragments held in apposition by the usual methods; compound fractures and compound comminuted fractures in which the de-

formity is great and the chances of proper replacement of the parts small.

Briefly, the advantages to be gained by the operative treatment of fractures are (1) an anatomical restoration of parts; (2) a restoration of function to the normal; (3) a shorter convalescence and less pain.

Secondary to the surgical principal involved is the technic to be employed. Metal splints are perhaps the best means of holding the bony fragments together. Silver wire has not been very satisfactory. An ordinary steel plate, using ordinary steel screws on each side of the line of fracture ensures the best fixation. Oftentimes long screws are sufficient to hold the fragments in position. Different sized drills are used for boring holes for the screws. Certain cases, such as fracture of the olecranon process of the ulna or the patella, can be competently held by chromic catgut, placing the limb in a plaster cast during convalescence. The least possible handling or bruising of the soft parts is to be desired.

If after an attempted reduction of a recent fracture we do not get a perfectly accurate approximation of the fragments, as shown by the X-ray, so that there will be practically no disturbance to the longitudinal axis of the shaft, we should resort to operation or open treatment, thereby gaining the anatomical and functional result to be desired.

Dr. Murphy of Chicago has recently brought out a new method of treating ununited fractures by the transplantation of bone (Medulary splint.) He chisels off a piece of the sharp edge of the tibia of the opposite leg and drives it firmly into the marrow of opposing parts, sometimes he uses nails to assist in holding the bone splint in place. I saw him doing this work last May and saw the photos and skiograms that had been taken at frequent intervals following, showing the growth and devel-

opment of the bone to full size. Later in June at Atlantic City I saw many of his cases that had been treated in this way. There is no question as to the satisfactory results of this treatment. One thing Dr. Murphy told me was that bone from another person or from the lower animal, would not answer, it must be from the patient. Dr. Murphy opposes all forms of fixation splints in compound fractures. I quote from his April clinic as follows:

"From an experience running over thirty-five years we have been taught the important lesson that we should not wire or nail or plate a compound fracture. If you do, you insure suppuration. If you close it up with a careful preparation of the soft parts, with a careful iodine preparation of the skin, without washing it, or scrubbing it, or soaping it, or alcoholing it, or solutioning it, but in a dry way clean it out and close it up—in a large percentage of the cases of compound fracture you will have immediate primary union of the soft parts, and the case will go on to repair as a simple fracture almost uniformly in 85 per cent of the cases. Four cases out of five of compound fracture that are immediately wired, nailed, or splinted will suppurate, and a very large percentage of these will have a failure of union. Now, with this colossal experience, observation of over one-third of a century, it is very evident that we should not adopt that practice.

If you will remember, in Lane's early article he did not make it clear that these plates were not to be used in this class of cases, but later he did accentuate it. It should be made clear to every one that they are not to be used in cases of COMPOUND FRACTURES. If we bear this constantly in mind, we will save a long period of time and avoid many evil results, as shown by Lane.

406 Wright & Callender Bldg.

DIAGNOSIS AND TREATMENT OF FRACTURE.*

BY P. C. H. PAHL, B.S., M.D., INSTRUCTOR OF ORTHOPEDICS, FRACTURES AND DISLOCATIONS AT THE COLLEGE OF PHYSICIANS AND SURGEONS, MEDICAL DEPARTMENT OF THE UNIVERSITY OF SOUTHERN CALIFORNIA, ATTENDING SURGEON AT THE LOS ANGELES COUNTY HOSPITAL.

To diagnose the extent and nature of a fractured bone one must form a correct mental picture of where the bone is broken, the nature of the break, the relation of the different fragments to one another, the amount of injury which has been done to the adjacent soft parts or joints and the general condition of the patient following the injury.

The history of the accident as told by the patient or a bystander very frequently gives you quite an insight into the nature of the fracture—for example—a patient sitting up in bed and reaching for his watch which was hanging on the bedpost at the foot of the bed stated that as he bent forward he heard a loud report followed immediately by a severe pain in his thigh. There proved by examination and X-ray to be a fracture at the junction of the middle and upper third of the femur. With such a history one would naturally conclude that the femur was diseased—this case was probably an osteosarcoma which terminated in death ninety days later.

Another man stated that while he was attempting to crank an automobile the owner, who was seated in the machine, manipulated the sparking lever, and as the chauffeur was attempting to spin the motor it back fired and broke his arm. Such a history would always mean a *colles* or *chauffeur's* fracture which the X-ray depicts to be a transverse or oblique fracture of the radius with the lower fragment displaced backward and upward, giving either a silver fork or bayonet appearance to the hand and because of the shortening of the radius the styloid process of the ulna is very prominent. The X-ray pic-

ture is preferably made in both the anterior posterior and lateral planes; if, however, only one picture can be made it should be made laterally.

Another patient gave the history of having jumped from a rapidly moving suburban trolley car and ran into a telegraph pole, striking his knee forcibly against the pole. He was disabled immediately, it being impossible to keep that knee from bending upon weight bearing. The exact nature of this patella fracture was not known until the fracture was laid open, when it was found that the patella was broken into six pieces, which condition an X-ray picture had not revealed—patella pictures must be made from the side, as they do not show up anterior posteriorly against the femur and tibia.

One would expect to find a comminuted fracture with this particular history. Another patient who jumped out of a second-story window in his effort to escape pursuers also broke his patella, due, undoubtedly, to muscular action as, upon opening up the fracture, two fragments only were found.

Many fractures have a false point of motion; crepitus is as important a sign of fracture now as it ever was; the hard, ivory-like crepitus of the adult bone is an indication that the ends of the bone are together without any intervening soft parts. When I have not been able to produce crepitus in thigh fractures the X-ray invariably shows the ends of the bone separated. Some of these have had to be opened to secure apposition on account of intervening or button-holing of one of the fragments.

The soft crepitus in the ends of the long bones of the younger people would

*Presented before the Los Angeles County Medical Association, October 18, 1912.

lead one to believe that there is an epipheseal separation.

Local contusions, ecchymosis and wounds have a bearing upon the diagnosis as does also deformity shortening, loss of function, pain, internal hemorrhage and paralysis, but greater than all these is the X-ray plate. I rarely use the floroscope.

In many cases the information gained by an X-ray picture amounts to practically the same thing as opening the fracture and viewing the bone directly, but it has, however, been my experience more than a few times that a mental picture of the real condition of things was incomplete until after the fracture was cut down upon, the parts exposed to view and a more thorough examination made.

In one case of compound fracture at the lower end of the femur the fact that the fracture also went into the knee joint was not discovered either by palpation inspection or numerous X-ray pictures. In another case of fracture this near the upper end of the femur, it was not discovered that the psoas muscle had torn off a large fragment of bone including the lesser trochanter until the fracture was cut down upon; in order to hold this fragment in place additional instruments and material had to be sent for so it would seem that an exploratory incision in cases of both open and subcutaneous fractures is often advisable as a diagnostic measure.

In the case of a street car collision I observed a patient within ten minutes after the accident. He was apparently in great shock and after the most careful examination the only injury that could be discovered was a femur fractured within six inches of the lower extremity. This man had no blood on his clothes precluding all external hemorrhage, his ribs were not broken, there were no contusions about the chest or head. The abdomen was flat and for the moment it was difficult

to account for the grave constitutional symptoms.

The patient's incessant demand for water, his dilated pupils, air hunger and clammy skin seemed to indicate that the shock was due to concealed hemorrhage. It was soon discovered that the foot of the injured limb was much colder than its fellow and also had a typical mottled appearance; the thigh was now noticeably larger than the other, which led to the conclusion that when the fracture occurred the sharp fragments had laid open the femoral artery and hemorrhage continued into the thigh until it was held in check by limiting fascia.

Had the fascia been torn no doubt extravasation into the subcutaneous tissue would have been so extensive that death would have soon followed. In spite of this tremendous hemorrhage which existed beneath the fascia at no time was ecchymosis present on the thigh or affected limb.

After diagnosis has been made the thought of treatment naturally follows, and a great deal of the success of the treatment depends upon the correctness of the diagnosis.

In undertaking the treatment of a fracture I make it a rule to employ the least means necessary, those means which involve the least risk to the patient as to loss of limb or life, and which will produce the desired results.

I feel that too much emphasis cannot be placed upon the word **results**. Results are what our patients want and that man who can produce desired results at the least risk and without waste of time is the most skilful. Naturally that man who is endowed with judgment who does not ride hobbies and, therefore, uses any or all means which have been advanced can obtain the best results.

There is no one method which is best for all cases and the successful surgeon must be able to select the

proper method for treatment of a given fracture.

In a case of vicious union of the metacarpal bone of the index finger on the right hand of a cigar maker the bone had been refractured and set without success; perfect results however were obtained by applying an internal splint (Lane's plate) with four holes and suitable sized screws; two years have now elapsed and the plate has not caused any irritation.

Another successful case of plating was a case of fracture of the clavicle at its greatest curvature, the sternocleido mastoid and other neck muscles pulled the proximal fragments up producing great deformity which baffled all other efforts; the scar is not noticeable and there is absolutely no deformity.

In the field of treatment of fractures there is probably nothing which is so constantly growing in popularity nor better applicable to an increasingly greater variety of cases than the tractor.

I employed it successfully in the treatment of fracture of both articular processes of the lower jaw. The deformity in these cases, due to the shortening of the rami, presents a condition where the molars of the upper and lower jaw are in contact while the incisor teeth are separated an inch or more.

Under the anesthetic this deformity could be entirely overcome by making traction upon the point of the chin. I conceived the idea that a properly applied helmet of plaster of Paris, with plaster carefully molded about the jaw would keep this fracture in place and in order to hold the fragments in apposition while the helmet was being applied it was necessary to place a sharp pointed hook retractor through the soft parts directly into the mental process of the mandible.

To my disappointment when the plaster helmet was firm and I attempted

to remove the retractor the deformity immediately re-occurred and I was at a loss to know what course to pursue; it was evident that as long as the assistant held the retractor in place the bone remained in position. Therefore I realized that it was necessary to fix the retractor in such a way that it would do the work of the assistant.

It was an easy matter to project a piece of wood from the top of the helmet to which, by means of a rubber tube, the handle end of the retractor was fastened, the elasticity giving the necessary traction and the hook remained in place without giving any trouble to either the patient or myself. It was removed in four weeks time and union had occurred with absolute apposition. Motion of the jaw was unusually good and in a few weeks complete function was restored. This simple procedure probably saved this patient a severe cutting operation which so frequently proves to be formidable when done to the bones about the mouth owing to the danger of infection or severe hemorrhage.

About eighteen months ago I treated a comminuted fracture just below the lesser trochanter in an adult about sixty years of age. Upon opening the fracture I found it to be very oblique and instead of finding two fragments as the X-ray led us to believe we found we had to deal with three. A large six hole Lane plate designed for the femur held the oblique fracture only indifferently and a silver wire placed around all of the fragments was necessary to give sufficient stability to the fracture and also to hold the third fragment in place. The operation took an hour and a half to perform and the patient was put to bed in good condition; traction was applied using twenty pounds weight and the patient made an uneventful recovery. I observed him one year after the operation when he had recovered absolute function with no deformity whatever. Up to the

present time neither the plate nor the wire have caused him any trouble.

Thirty days ago I was called upon to treat a similar fracture, the patient was placed in horizontal Bucks extension; a lateral X-ray picture showed the fracture was within three inches of the lesser trochanter and was comminuted there being five distinct pieces; the upper and lower fragments were widely separated. The upper fragment pulled up and out and was so short that it was impossible to control. On account of this we decided to bring the lower fragment up to the upper. To accomplish this I pulled the femur straight up in a vertical position. I found however, that the patient was so uncomfortable with his knee straight that it was necessary to bend the knee at right angles and apply Bucks extension to the thigh only where we had difficulty in maintaining it as it persistently slipped off and caused vesication of the skin.

I then concluded that the only way it would be possible to make required traction would be by means of an instrument which I have chosen to call a spine tractor. This instrument consists of a heavy metal horse shoe shaped band provided with two sharp spines at either extremity. The patient was placed under a general anesthetic, an incision made over the inner and outer condyles through which the spines were screwed until the sharp points firmly entered the bone. It was now possible to apply traction in the vertical position, forty-five pounds was the extreme limit that could be used as more weight lifted the patient from the bed.

An X-ray picture taken laterally several days later showed the bones still considerably separated. In order to bring the bones in better apposition a yarn rope was placed about the thigh and fastened to the railing of the bed at the side and the foot of the bed elevated eight inches causing the body to gravitate against this pull. Another

loop was placed about the thigh to control the upper end of the lower fragment. This was attached to a rope which was placed over a pulley at the head of the bed and ten pounds of weight applied.

An X-ray picture made a few days later showed all of the fragments in line. In this case traction is applied in three distinct directions the bone is apparently well reduced. On account of great comminution of the ends of the bone opening of the fracture would be certain to result in marked shortening as it would be impossible to plate the numerous fragments.

Traction is successfully applied to fractures of the clavicle, it works wonders in fractures of the surgical or the anatomical neck of the humerus.

In one case of multiple compound comminuted fracture of the tibia there being in all eight distinct fragments that were recognizable in the X-ray plate I applied traction by means of the spinous tractor to the malleoli and was rewarded by perfect recovery.

In using foreign material in the treatment of fractures such as wire, plates, screws, nails, etc., I have found frequent X-ray pictures of great value for the X-ray picture will frequently show softening about the foreign body before any perceptible symptoms such as temperature pain or swelling appear.

Whenever an area of softening appears about a foreign body the sooner it is removed the better for the patient.

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When the circus was in Fresno, it is said that twenty-six physicians were called one night before one could be obtained to attend a case in a lodging house. Moral: If you are taken sick in a lodging house in Fresno, when there is a circus in town, call for the health officer or the city physician--who probably haven't the price.

TRANSPLANTATION OF BONE IN FRACTURES.*

BY C. P. THOMAS, M.D., LOS ANGELES.

Dr. Murphy has demonstrated beyond a doubt that transplantation of bone, if done in a certain class of cases, and under certain conditions, is perfectly feasible; and a most satisfactory method of dealing with ununited fractures, or fractures where there is loss of much bone tissue, and especially in cases where malignancy or traumatism has caused the loss of a considerable section of a long bone.

The following rules must, however, be observed: First, the bone must be taken from the same individual, preferably from the spine of the tibia of the well leg; second, that there must be direct contact of both ends of the graft with the bone, and preferably the graft should be driven snugly into the rimmed out medullary canal at each end. Nails may be driven in to prevent undue shortening and to make the contact more accurate if there has been much loss of bone substance.

The site of reception of the transplant must be free from infection or disease of any kind, and must not have sustained a recent trauma. After placing the transplant, the wound must be closed so as to exclude the air. Reasonable fixation of the limb must be maintained, and the usual treatment for simple fracture be instituted. The size of the transplant should be as large as can be taken conveniently from the tibia, provided the same is not larger than the place to be filled.

In chiseling the slip from the tibia it is his custom to leave the periosteum attached to one side of the transplant, but he is not at all certain that this is necessary. He is certain that he has demonstrated that bone regenerates from bone and not entirely from the periosteum.

He is not yet certain whether the transplant simply acts as a stimulant

to the osteogenic process, the Haversian canals with their lacunae, canaliculi, lamellae and Haversian spaces, serving as carriers of the osteoblasts and osteoclasts, the compact tissue eventually being entirely absorbed, its place being taken by new bone; or whether it remains after complete regeneration has taken place simply as a part of the new bone.

You will remember that both osteoblasts and giant cells are found in great abundance on the walls of the medullary canal, also that the canal does not exist in early foetal life. To what extent it reforms later in these cases is still unknown. This, however, is not a matter of great importance from a clinical standpoint.

He showed a fresh sawed section after amputation of a transplant case in which a sequestra had formed consisting of about one-half of the outer surface of the transplant, the rest being live and normal bone, thoroughly attached latterly and at both ends to the surrounding bone tissue. This was from another clinic, none of his transplant cases requiring subsequent amputation.

He claims, and I quite agree with him, that this operation will relieve many of the incurable ununited fractures which have hitherto resisted the usual treatment, as well as all the foreign body application methods.

Two interesting cases were shown by him in which the shaft of a long bone had nearly all been removed including its periosteum, a long, narrow strip of transplant had been snugly fastened and nailed into the ends of the bone, so as to retain the original length of the limb. The transplant at time of insertion was not larger than the little finger. Radiographs were taken once a

*Presented before the Los Angeles County Medical Association, October 18, 1912.

week following until at the end of six weeks the transplant was not only united at both ends, but had grown in circumference to the normal size of the removed portion of the bone.

He is careful to sew the muscles to the transplant with very fine wire at their normal places of insertion or attachment. In two or three instances he has demonstrated with the X-ray that the muscle attachment was not only complete, but actually produced a small tuberosity resembling the original one at the place of the muscle insertion.

He showed one case in which he had transplanted seven inches of the upper end of the humerus, covering the end in the glenoid cavity with fascia—giving the boy a very useful arm. This is, I believe, his only instance in which he has not placed the transplant in actual contact with bone at both ends. Examination by touch and X-ray shows this bone to have grown to the same size of the well humerus, notwithstanding that the periosteum had been all removed with the diseased bone.

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A CASE OF SEVERE DYSTOCHIA RESULTING FROM CICA- TRIX AFTER AMPUTATION OF THE CERVIX. VAGINAL CEASARIAN SECTION.

LYLE G. M'NEILE, M.D., LOS ANGELES, CAL.

The operation of vaginal cesarian section, or colpohysterotomy was introduced by Duhrssen in 1896. The primary object of the operation is to overcome any resistance on the part of the cervix to dilatation and subsequent delivery. In the abdominal cesarian section, on the other hand, the resistance to be overcome is usually that offered by the bones of the pelvis. The general indications for the vaginal operation, then, are eclampsia, where rapid delivery is indicated, and the condition of the cervix renders artificial rapid dilatation of the cervix dangerous or impossible; inoperable cancer of the uterus affording a bar to delivery; antepartum hemorrhage caused by premature separation of the placenta; stenosis of the cervix; and possibly in maternal cardiac disease where delivery is indicated in the first stage of labor. A markedly contracted pelvis is always a contraindication to the operation.

Case. Mrs. K., age 39, para iv. Measurements: Interspinnous 22 c.m., inter-crystal 25.5 c.m., right oblique 20 c.m., left oblique 20.5 c.m., external conjugate 17.5 c.m., internal conjugate not accurately taken. Obstetrical history:

Her first three deliveries had been instrumental. She had received a third degree laceration with the first, and had been subsequently repaired. Lacerations had been immediately repaired in the second and third deliveries. The last delivery was twelve years ago, and

I been followed in two years (ten years ago) by an amputation of the cervix for extensive lacerations.

History of present labor: Labor had been induced by the introduction of a No. 1 Voorhees bag on March 18th, the indication for the induction of premature labor being the contraction of the pelvis, and her previous obstetrical history. The small colpeurynter was soon expelled, and pains ceasing, the No. 2 size was introduced. This was followed by the larger sizes, but the pains induced were inefficient, and on the evening of March 19 a bougie was introduced into the uterus, followed by labor pains of fair intensity and frequent intervals. There was very little progress. The membranes ruptured spontaneously at 4 a.m. on March 20th. The head was not completely engaged, the cervix was dilated to about four fingers.

At 7:30 a.m. I was called in consultation by the attending physician, Dr. P. V. K. Johnson. The head was engaged, the cervix was still dilated to about four fingers, was cicatricial, and apparently had been amputated to the level of the vaginal mucosa. The lower uter-

ine segment was very thin, and there was apparently an impending rupture of the uterus. The operation of vaginal cesarian section was advised and accepted.

Operation: Under nitrous-oxide oxygen anaesthesia, administered by Dr. P. C. H. Pahl, an incision $1\frac{1}{2}$ inch in length, parallel to anterior margin of the cervix, and one-fourth of an inch from the same. Second incision in median line of anterior vaginal wall, at right angles to first, and about one inch in length. Dry gauze dissection of bladder from lower uterine segment, care being taken to avoid opening peritoneum at point of reflection off uterus. Uterus was opened with scissors, in median line, until sufficient room was obtained to permit the delivery of the head. Mid-forceps were applied by Dr. Johnson, and easy delivery effected. Uterine and vaginal incisions were sutured with No. 2 chromic catgut, and a one-inch gauze trailer used to drain area between uterus and bladder.

Post-operative History: Drain removed in 48 hours. There were no unusual phenomena during the puerperium. Vaginal examination by Dr. Johnson on the tenth day showed good union. Patient was discharged from the hospital on the 21st day.

In a rather hasty search through the literature, I am unable to find any report of such a severe dystochia resulting from an amputation of the cervix.

I am indebted to Dr. P. V. K. Johnson for data furnished me in preparing this report of the case.

AMERICAN POTASH PRODUCTION.

[Announcement of United States Geological Survey.]

Important Potash Deposits in California.

An apparently important deposit of potash has been discovered at Borax or Searles Lake, in the northwestern corner of San Bernardino county, Cal. This deposit is in the bed of what was formerly a great lake, now almost dried up, whose central depression contains a large body of crystalline salts, saturated with brine. Samples of this brine, taken from six wells distributed over the salt flat, showed an average of 6.78 per cent of potassium oxide (K_2O)

in solution, and an average salinity of 43.82 grams of solids per 100 cubic centimeters.

The importance of the deposit is due to the occurrence of the potassium salts in soluble form in a natural saturated brine, under conditions especially favorable to its separation and recovery by solar evaporation. The bed is estimated as at least 60 feet thick and covering 11 square miles. A very conservative estimate places the amount of potassium oxide at 4,000,000 short tons, but the available tonnage may well be expected to exceed 10,000,000 tons, which would supply the country at its present rate of consumption for 30 years. Other minerals found in the Borax Lake deposits include borax, gypsum, glauberite, carbonate and sulphate of soda, salt, thenardite, and hanksite, the latter salt carrying as high as 2.33 per cent of potassium.

Potash From Kelp.

The survey has just published, in a report on potash, a description of a potash-producing plant which is now in actual operation in the United States. This plant is in Southern California about 30 miles north of San Diego, where it was stated that operations in the commercial extraction of potash from kelp or seaweed would begin about March 1. The plant is owned by the Coronado Chemical Co., which has been working on the potash-kelp problem for several years. It consists of four furnaces capable of treating 6000 pounds of dried kelp every 24 hours, and additional furnaces are under construction with a proposed total capacity for treating 36,000 pounds of dried kelp a day. The year 1912, the report states, will probably show a substantial output of potash in the United States, in addition, of course, to that obtained from wood ashes.

A copy of the report, "Potash Salts, 1911," may be obtained free on application to the Director of the Geological Survey, Washington, D. C.

SOUTHERN CALIFORNIA PRACTITIONER

A MEDICAL, CLIMATOLOGICAL AND SOCIOLOGICAL MONTHLY MAGAZINE.

This journal endeavors to mirror the progress of the profession of California and Arizona.

Established in 1886 by Walter Lindley, M.D., LL.D

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EDITOR SOUTHERN CALIFORNIA PRACTITIONER,

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EDITORIAL

REPORT OF THE LOS ANGELES HEALTH DEPARTMENT.

Have you seen the annual report for the year ending June 30th, 1912? The report shows 5267 deaths during the year, a rate of 15.05 per thousand, based on an estimated population of 350,000, which probably makes this rate appear higher than it really is. This is an increase of 446 deaths over the preceding year, since which time there has been new territory added to the city and considerable increase in the actual population. It is interesting to note that there were 738 deaths in the County Hospital, more than the average population of that institution. There were 831 deaths certified to by the County Coroner, of which 37 were homicides and 133 suicides. There were 36 deaths from steam railroad accidents, 29 from street car accidents, 29 from automobiles and 23 from injuries from other vehicles. There were 559 deaths in children under one year of age, giving 10.61 per cent of the deaths from all ages, or 1.59 per thousand of population.

There were reported 1331 living cases of tuberculosis, and there were 906 deaths from tuberculosis of all forms, of which 794 were pulmonary, 15 acute miliary, 45 tubercular meningitis, 2 Pott's disease, and 50 tubercular affections of other organs; 290 of these deaths occurred in the County Hospital. Reports on file at the Department of Health indicate that only about one-fourth of the cases of tuberculosis are reported, which would give a total of some 6000 cases of tuberculosis in Los Angeles. This is based on the fact that only about one-fourth of the deaths from tuberculosis had been previously reported as cases of that disease.

The report states: "On account of the provisions of the ordinance regulating hospitals, we have had to force a Tuberculosis Hospital to close business in the city limits. It is unfortunate that some provision cannot be made whereby hospital accommodations can be maintained in the city limits for the care of tubercular patients and thereby remove the congestion, or

crowding, of tuberculosis cases in rooming houses, apartment houses and tenement houses." Yes, it is unfortunate that such fool regulations should be passed by a supposedly intelligent city, forcing those sick with any disease to leave the city or forego the advantages of hospital treatment. It is not just to the communities that thus must receive our sick, nor to the patients, nor to those of us who must live in the rooming houses, apartment houses and tenement houses with the patients that should be in suitable hospitals. Who is responsible for that ordinance?

There were 107 cases with eight deaths from smallpox, the most extensive and fatal epidemic of that disease since 1899. No deaths occurred in any person who showed evidence of having been successfully vaccinated. "Under the present vaccination law, we are rapidly accumulating a large number of unvaccinated people in our community, which lays us more and more liable to a severe epidemic of smallpox."

The report contains some interesting items as to the daily consumption and sources of the milk supply of Los Angeles. The daily milk supply amounts to approximately 35,074 gallons, besides 750 gallons of heavy cream and 120 gallons of bulk condensed milk. The total supply is produced on 1461 dairies, containing 22,799 cows. Within Los Angeles county there are 1279 dairies with 14,250 cows, producing 29,706 gallons of milk. Orange county supplies 4133 gallons, Riverside county 825 gallons, and San Bernardino county 410 gallons of milk daily. The cream supply is handled chiefly by three creameries, two in Kings county and one in Tulare county. Incidentally, the inspector is located at Tulare and has 224 square miles in Tulare county and 452 square miles in Kings county to cover in making inspections of the 83 dairies.

Wonder what he does with the balance of his time.

The report gives a very modest account of the failure to pass the tuberculin ordinance, which was defeated by only some 5000 votes, notwithstanding the great amount of misrepresentation and the free use of money by the dairymen, who organized to oppose it. "By the defeat of this ordinance, Los Angeles has taken a long step backward in the improvement of its milk supply." Mild, isn't it? With heroic effort we refrain from telling you what we really think of it. By the way, do you remember the attitude of the Earl papers at that time? But we will not digress. During the year 85 cattle were condemned for tuberculosis. These were condemned because they were slaughtered; many of them had been in the dairy herds from which Los Angeles receives her milk supply. Moral: Boil your milk, in Los Angeles.

Los Angeles, which consumes more fruit than any other city of the same population, has one fruit inspector. Since there is nothing for him to do, he probably plays pinochle with the cream inspector.

Something over 2900 hotels, lodging houses and apartment houses in the city, housing approximately 85,000 persons, many of whom have come to Los Angeles for their health, are carefully inspected by the Health Department, one inspector being assigned to this work. The balance of his time is spent with the cream inspector and the fruit inspector at pinochle. "There are approximately 1500 hotels, lodging houses and apartment houses which we have been unable to reach during the past year and some of those are undoubtedly in very filthy and unsanitary condition."

Wonder if that is a four-handed game of pinochle? Possibly Moritz, who has nothing much to do, is the fourth player.

All in all, the report is evidence that we have an excellent Department of Health—what there is of it.

THOSE PRE-ELECTION FRAUDULENT CHARGES.

We refer to those charges concerning sex examination in the public schools, signed by Blight, Bean and Craig. As we have previously stated, the Board of Education investigated those charges in committee of the whole and found that they were unqualifiedly false. Since we had not seen any mention of the final action of the Board of Education in the daily press, we wrote to the Board for information and received the following:

Los Angeles, Cal., October 28, 1912.
Southern California Practitioner,
500 Auditorium Bldg.,
City.
Attention Geo. E. Malsbary.

Dear Sir: Enclosed you will please find copies of the majority and minority report of the Board of Education in regard to the investigation of the Departments of Health and Development and Physical Training in the public schools of this city.

Respectfully,

WM. A. SHELDON,
Secretary.

MAJORITY REPORT OF THE COMMITTEE OF THE WHOLE.

Los Angeles, Cal., May 2, 1912.
TO THE BOARD OF EDUCATION,
Gentlemen:

After an investigation of the Departments of Health and Development and Physical Training, your Committee of the Whole recommends concerning these departments, that, for their better guidance, the following rules be adopted:

(1) That both departments be continued.

(2) That the Department of Health and Development be changed to the Department of Health.

(3) That the Department of Health have supervision of the work through all the grades in the Los Angeles School District.

(4) That the Department of Health do all physical examination work, and their powers and responsibilities be recommendatory only.

(5) That the Department of Health include in its staff medically trained physical experts, to do the examining work for the physical department, and to make necessary prescriptions for corrective physical work.

(6) That the Health Department be responsible for reports on the sanitary and hygienic conditions of the schools of the city.

(7) That two divisions be made in the department of Physical Training, the first to include all the work in the elementary schools, under the direction of a Supervisor chosen for that work;

and the second division to include the work of the Intermediate and High Schools, under the direction of the Principal of the individual school and the physical training teachers chosen to have charge of the work in the several schools. We recommend that the work in this second division be not placed under a general supervisor.

(8) That the teaching of Hygiene in the separate Intermediate and High Schools be under the direction of the Superintendent of Schools and principal of the different schools, and that where parents desire to have children excused from attendance upon the hygiene classes such privilege shall be accorded them.

(9) That blanks similar to those used in protests against vaccination be furnished on request; and that printed notices of physical examinations be given to the children, allowing time for protest, and that all protests made in good faith, except in cases of contagious diseases or epidemics, be respected, and when communications are sent to parents concerning the physical condition of the children, such communication shall be sent under sealed cover.

(10) That the school authorities interpret one half-day in the Department of Health as consisting of three hours' service at the schools during the morning session, and such additional time as the varied phases of the work may at times demand.

(11) That permission be allowed practicing physicians employed in the school department on half day time, during such time, to respond to emergency calls in case of severe accidents or the critical illness of patients, provided this time is made up during the afternoon sessions of the schools.

(12) That any part of the time for which physicians are employed by the school department shall not be taken by any physicians for more convenient arrangement of his practice, or for other professional work outside of the school department.

(13) That physicians of the department shall not utilize their own positions in the school department to augment their own practice of medicine in any way whatever, nor shall they recommend any physician of the city to pupils, parents or teachers of the city schools.

(14) That no departure from these requirements and conditions shall be made, except through the office of the Superintendent of City Schools.

Respectfully submitted,

MINORITY REPORT OF THE COMMITTEE OF THE WHOLE.

Los Angeles, Cal., May 2nd, 1912.
TO THE MEMBERS OF THE BOARD OF EDUCATION,
Los Angeles, California.

Gentlemen:

I dissent from the report of the Committee of the Whole because it fails to present any findings of fact as a result of its investigation of the Department of Health and Development; and in my opinion a grave injustice would be done to the staff of this Department, likewise to the teaching force, particularly of the Manual Arts High School and the Hollywood High School, unless we established conclusively the result of our findings as to the physical sex examinations. I therefore recommend that this Board of

Education express its conclusion and belief that after careful investigation it finds that there has not been any evidence brought to the attention of the Committee of the Whole of any physical sex examination of any girls made in this Department except for the gravest reasons and then only made by women physicians and always with the pupil's consent and the consent of the parents or guardians first had and obtained.

Respectfully submitted,
(Signed) JOSEPH SCOTT,
J. J. STEADMAN.

It will be observed that the majority report makes no mention of the findings of the Board in committee of the whole, nor does it exonerate the medical men connected with the public schools, who were slanderously attacked by the false charges signed by Blight, Bean and Craig. It is not strange, though dishonorable, that these members should have signed the majority report, but we are surprised that Frank and Guinn permitted their names to be added to those who would thus defame the medical men implicated in the charges which were the basis of the investigation. We are glad to note that two real men, Joseph Scott and J. J. Steadman, brought in a minority report briefly stating the truth.

A DECENT NEWSPAPER.

We are glad to note the increasing number of clean newspapers. The latest addition to the list is the San Diego Examiner. The list will grow more and more rapidly as the press of this country becomes convinced that it pays to be decent. We respect the pioneers in this field, because they are actuated largely by a sense of right rather than dollars. We are glad to give space to the following extract from a letter received by the editor from Dr. Robert Smart of San Diego:

I am sending you under separate cover a copy of the San Diego Examiner, a new paper of this town owned by Mr. Wilde.

When its first issue came out several days ago I suggested to Mr. Wilde that he could do a great deal of good in the newspaper world by establishing the precedent of conducting a sheet which would contain no advertisement of an objectionable character, as for instance

those of quack doctors, whirling sprays, conception preventors, patent medicines, etc.

I used the argument with him that when it became known to his patrons that each and every advertisement in his paper stood for honesty and not for fake, that it would be an added advantage not only to his paper but to his patrons and his advertisers.

The result of this short talk with Mr. Wilde is seen in the paper I send you in which such ads as the "Marvelous Maycs," "Dr. Kelley," etc., which appeared in his first issue were refused space in this, and Mr. Wilde is going to prevent all fake or objectionable ads in the future. I believe such work as this should be encouraged by the medical profession.

May the tribes of Dr. Smart and Mr. Wilde increase!

MISREPRESENTATIONS FROM THE UNRELIABLE EARL PAPERS.

The Tribune has no ax to grind, professional or political, in its dealing with this matter. Its sole purpose is to present the truth. Its purpose is to supply the people of this city authentic information concerning the injurious reports that have been spread broadcast. The Tribune has devoted a great deal of labor to patient examination of the situation and the determination of the exact truth concerning it.

The Tribune doubts not that the fathers and mothers of Los Angeles, who have been made the victims of a cruel campaign, will welcome the assistance it is rendering. It doubts not that the business men, who have suffered pecuniary injury through the propagation of falsehood, will gladly co-operate in this endeavor to re-establish the truth, and it would seem that even the doctors of the city should gladly lend their aid to end the scare.

There is no epidemic of infantile paralysis in Los Angeles. There never has been. There are no indications that there ever will be.

Is Earl's character reflected by his press? Is this the nearest he can come to presenting the truth? If he was honestly mistaken, why hasn't he apologized since so many of his slanderous statements have been shown to be unqualifiedly false? Any fool can make a mistake, but a heartfelt apology is indicative of real manhood. The Earl papers have not apologized for their dastardly attacks upon the medical profession.

MORE ROT.

The following is from an editorial headed "Busybodies inflict damage on

Los Angeles," in the Tribune August 21, 1912:

The enormous damage that has been inflicted upon Los Angeles through the senseless scare promoted by the apostles of medical superstition was clearly set forth by The Tribune yesterday morning. For weeks the propaganda has been in progress, having for its purpose the creation in the public mind of the disease of fear, itself the source of most disabilities. It has been charged that among the busybodies who have devoted themselves to the unsettling of the public mind some were inspired by purely mercenary considerations. The more dread the more disease, and the more disease the more profit.

Doesn't that sound just like Earl? Do you know of any physician having made as much money through the practice of medicine in California as this very man, Earl, is claimed to have made dishonestly? It would seem that the veriest quack would be a saint compared to this individual, whose mind is capable of concocting such incriminating, libelous charges against our profession, thus reflecting his own revolting character.

PHYSICIAN TEARS THEORY TO PIECES.

This is another article in the August 21st issue of Earl's Tribune. The "reputable physician" here referred to is Dr. H. D. Wells, 204 Wilson building. Never heard of him? Why, he is one of those "Earl" physicians. We understand that the State Board got after him because of some alleged abortion work. Physicians of that type naturally are averse to organized medicine. No trouble for such men to tear any theory to pieces. We haven't space for his nonsense, or we might reproduce some of his idiotic effusions as published in the Tribune.

PROMINENT PHYSICIAN SCOUTS EPIDEMIC TALK.

Remember that headline in the Earl Tribune, August 21, 1912? It tells of the remarkable utterances of "Smith Dabney, A.M., M.L., M.D., one of the best known physicians in Los Angeles."

You never heard of him? True, you may not find his name in the physicians' directory. We are informed that he rooms at 816 West Tenth street. The city directory gives the following: "Physician 208 and 210 Hamburger Bldg., 320 W. 8th." Understand? Of course, commercial interests had nothing to do with his "scouts!"

CHILD NEEDLESSLY HELD AS PRISONER.

House Quarantined Because Tot Can't Walk Like Other Children.

This is the heading of a column of nonsense published in the Earl Tribune August 21, 1912. With it appear the pictures of the Piatt children with the inscription Gwendolyn Piatt begging to go out to play. As a matter of fact, Gwendolyn Piatt would have been totally unable to go out to play at the time the photograph was taken, because of paralysis of the lower extremities. (See the report of the Investigating Committee, in the October issue of the Southern California Practitioner.) In this Earl article, there is a quotation at some length of Dr. Charles F. Miller, 4501 Central avenue. This is one of the physicians quoted by the Tribune. We presume Dr. Miller's attitude was assumed because the Department of Health took him to task for apparently trying to conceal the case of the Piatt child. The case was not reported by Dr. Miller.

UTTERLY INEXCUSABLE.

Los Angeles Is Receiving an Object Lesson.

Los Angeles is receiving an object lesson in the losses and dangers that can be inflicted when medical tyranny is allowed unchecked to create fear in the public mind. The chief epidemic under which the city now suffers is one of fear deliberately created by groups of interested or superstitious men. Some of the consequences have been mental or physical and have been confined to individuals. Others are financial, and from

them the entire community is now suffering. Witness the quarantine against Los Angeles established by the state health officer of Arizona. Los Angeles is likely to pay a pretty penny for its medical whistle.

It is with regret that the Express has observed occupying conspicuous place among the spreaders of fear and creators of undue apprehension the health officer of the city. Instead of yielding to the incitations of those by whom he was beset, and thus adding fuel of fear to the fire of fear, Dr. Powers should have devoted himself to allaying the foolish apprehensions that existed and quieting the fits flung by the practitioners. It was not the community that needed treatment. It was the doctors. Whatever his motive in submitting himself to the manufactured apprehensions of the scare-promoters, he has inflicted heavy damage upon the city and caused needless suffering to thousands of parents whose affection for their children has been inexcusably played and preyed upon.

By consulting the report of the Investigating Committee, appointed because of these ruthless false statements, you may know approximately how asinine this editorial from the Earl Express really is. The heading of his editorial, "Utterly Inexcusable," well applies to all the discussions of medical matters that emanate from the slimy malodorous slandering Earl of Los Angeles.

MORE EARL.

The deliberate creation of fear has been a grievous offense against Los Angeles. The attack upon the welfare of the city has been utterly unjustified. The financial loss occasioned by the campaign has been considerable, but even more to be deplored is the cruel apprehension that needlessly has been inspired in the minds of thousands of parents and by them communicated to their children. The money loss will be recovered when, in due time, truth overtakes the lies that have been circulated abroad concerning conditions in Los Angeles, but nothing can make amends for the suffering that has been inflicted on our own people.

We cannot blame distant communities for accepting exaggerated reports of conditions here when the department of health of Los Angeles itself distributes circulars filled with the most fear-inspiring injunctions. Parents are instructed: "Avoid having children come together as in picnics, parties and the like. A little boy four years old gave a party on Thursday. On Monday night following he was dead of poliomyelitis." If the diagnosis in that case was as incorrect as The Tribune has proved diagnoses in many cases of alleged infantile paralysis to have been, the boy might have died of any other disorder incident to childhood.

Despite the apprehensions needlessly fomented by the department of health to

the damage of the city that maintains it, despite the campaign that has been most sensationally conducted to create fear in the minds of the fathers and mothers of Los Angeles, The Tribune asserts that there is no epidemic now prevalent in Los Angeles, and that there never has been. The Tribune declares that there is not and there has not been any reasonable justification for the tactics that have been employed by those who have assumed to be, but who have not been, the guardians of the public health. Assuming to protect, they have inflicted injury.

And so our putrid press of the benighted Earl ranted until an Investigating Committee was appointed by the City Council of Los Angeles. The report of that committee, published in the October issue of the Southern California Practitioner, well shows how false and unjustifiable were these attacks upon the respected members of an honorable profession by the putrescent Earl papers.

HAVE YOU NOTICED?

The City Council of Los Angeles thanked the Investigating Committee appointed by that body to investigate the epidemic of infantile paralysis, but failed to extend that courtesy to the physicians who took such an active part in bringing that epidemic under control. The physicians, as is so often true of those engaged in preventive medicine, must be satisfied with the consciousness of duty well performed. No, they are not asking for thanks.

In the Tribune for August 24, 1912, we note the following in the letter of appointment of the Investigating Committee, signed by Councilman Andrews: ". . . the committee has appointed you as a committee of physicians to make a report to this special committee as to the reports and misleading statements that have been made by the press throughout the country regarding the condition of health in the city of Los Angeles."

Has the committee investigated the reports and misleading statements of the Tribune? Or were they too rotten to merit attention?

EDITORIAL NOTES

Dr. James P. Hull of Stockton has removed to Bakersfield.

Dr. Paul D. Sprankle has been appointed city physician of Winslow, Arizona.

Dr. William V. Coffin has resigned as assistant superintendent of the Whittier Reform School.

In Stockton six smallpox cases recently developed in one house, 1545 North California street.

Miss Mabel Austin Lawrence and Dr. Ralph William Homer were married in Hollywood October second.

Drs. F. M. Brown and Richard Glaze have begun work on a sanitarium north of Scottsdale, near Phoenix.

Dr. T. L. J. Blanchard of San Jose is off for six months' post-graduate work in England, France and Germany.

Fresno is very proud of her new public market, which is being carefully watched over by her Health Officer, Dr. Aiken.

Dr. Charles H. Lowell has been appointed assistant surgeon in the United States navy, with the rank of junior lieutenant.

Dr. R. H. Mackerras has associated with himself in his Sierra Madre practice Dr. Albert O. Holmes, formerly of Long Beach.

The new Health Board of Sanger consists of Dr. C. H. Powers, J. E. Burnett, J. T. Walton, John Kearns and R. M. Wood.

Extensive improvements are planned for Miradero, the sanatorium founded by the late Miss Anna C. Blake at Santa Barbara.

The Vallejo General Hospital has incorporated. The incorporators and directors are J. H. O'Leary, Ida G. Reddan and J. D. Emery.

Dr. H. A. Renton, of Oakland, arrested August 29th for practicing medicine without a license, pleaded guilty and paid a fine of \$200.

Rt. Rev. Bishop Conaty has authorized the Sisters of Mercy to proceed at once with the construction of the new \$50,000 hospital at Bakersfield.

Dr. H. C. Peterson of Stockton had three medicine cases containing medicines and surgical instruments, stolen from his automobile October third.

The Santa Fe surgeons celebrated the fifteenth annual meeting of the Railway Medical and Surgical Society in Albuquerque October fourth and fifth.

Dr. Charles W. Brown has resigned as assistant meat and milk inspector, San Diego, having found a better opening after about two weeks' service.

San Diego is planning to have a physicians' building. It will be an eight-story reinforced concrete building, located at the corner of Eighth and D streets.

Officers of the Kern County Medical Society: Dr. T. M. McNamara, president; Dr. N. N. Brown, vice-president; Dr. Francis A. Hamlin, secretary and treasurer.

Dr. John J. Kyle has changed his location from Indianapolis to suite 702 Title Insurance Building, Los Angeles. Practice limited to otology, laryngology and rhinology.

Lieutenant Wilson, surgeon attached to the Fourth Regiment U. S. Cavalry at Nogales, Arizona, has been transferred to the Benicia arsenal, not far from San Francisco.

Dr. Edmund H. Dundas, formerly of Ludington, Mich., died in Los Angeles October seventh, aged 68 years. He is survived by a widow and six children, all living in Los Angeles.

Dr. T. A. Stoddard has returned to practice in Santa Barbara after a two months' visit to Honolulu, Japan and China. The doctor is enthusiastic about his trip, but glad to get back.

From The Argus, of Covina, for October fifth, discussing infantile paralysis: "Dr. Thomas J. Orbinson, highest authority on these cases in Southern California, was the expert summoned."

Dr. and Mrs. E. H. Parker, after a summer's sojourn in Prescott for the benefit of the health of the Doctor, have gone to Phoenix for the winter. The Doctor formerly practiced in Portland, Oregon.

Dr. Jennings's residence was entirely destroyed and the residence of Dr. Holcombe was badly scorched by a fire that caused some ten to fifteen thousand dollars' damage in Compton, October 15th.

Dr. O. S. Kueich, for many years attached to the emergency hospital service, San Francisco, leaves New York in January with a party of big game hunters who will penetrate the wilds of Africa.

Georgia, 18-months-old daughter of Mr. and Mrs. John S. Lake of Redlands, died in convulsions from strychnine poisoning due to eating some pills received by the mother from a Chinese herb doctor in San Francisco.

Secretary of the Treasury MacVeagh upon October 30th abolished the public drinking cup from railroad cars, vessels and other conveyances operated in interstate traffic and from the depots and waiting rooms of common carriers.

Commencement exercises were held by the training school of the County Hospital, of Stockton, at French Camp October 24th. The graduates were Viola L. Fickensher, Margaret E. McCaffrey, Tillie Wolf and Edith J. Lowery.

The Children's Hospital, Oakland, recently incorporated and elected the fol-

lowing directors: Mrs. F. G. Russ, Dr. Mary Stuart, Miss Edna B. Kennedy, Mrs. Albert E. Sykes, Mrs. E. Fleenor, Mrs. Walter Reed and Miss Bessie Wood.

Dr. James W. Stitt, a prominent physician and lodge man of Berkeley, passed away October 14th. He is survived by Mrs. Stitt and the following children: James Warren Stitt, Jr., the Misses Lucile and Sybil Stitt and Mrs. Elizabeth Ristenpart.

Dr. Charles R. Harden of 1425 West Fifty-seventh street expired while speaking to his Sunday-school class at the Third Presbyterian Church, Los Angeles, October 20th. The Doctor is survived by a widow and two sons, Holston and Owen.

Dr. J. H. Wagner of Selma made a trip east and returned with a bride. She was Miss Wilma Winnifred Wolfe of Ashville, Tenn., where the marriage took place. It was kept a secret until the Ashville Citizen told the story. Marriage will out.

Dr. Elbridge J. Best has been appointed surgeon of the Central Emergency Hospital, at San Francisco, to succeed Dr. Leo Floesser, resigned. Howard Naffziger of Nevada City has received an appointment in the emergency hospital service at the bay.

Drs. Albert Bauer, E. T. Lenoir, Rudolph Franke and N. Ogsday, all Germans of note in the scientific world, recently graced Los Angeles with their presence for a few days. How could they leave? Fortunately, they were not able to take Los Angeles with them.

Suit has been entered in the Superior Court at San Jose by Miss Ethel Townsend, a nurse, for \$20,000 damages from three local physicians, alleged to have been sustained by severe burns received from an X-ray while she was holding a child who was being examined by them.

Dr. E. O. Sawyer, County Health Officer for Los Angeles county, has been in communication with Dr. S. D. Brooks of the federal service relative to the establishment of a leper colony at San Clement Island. It is claimed that San Clement would support a colony of 300.

A field hospital and ambulance company has been ordered established in Los Angeles, owing to a lack of medical and surgical facilities for the National Guard shown in the recent maneuvers. Major C. W. Decker will be in charge. Dr. J. Edgar Colloran and Dr. Lasher Hart are two of the surgeons.

The following are the new officers of the Nevada State Medical Society: Dr. M. R. Walker, Reno, president; Dr. A. P. Lewis, Reno, vice-president; Dr. P. J. Mangan, Winnemucca, second vice-president; Dr. M. A. Robison, Reno, secretary; Dr. B. F. Cunningham, Reno, delegate to the A. M. A.

The University of California, among numerous other requests for appropriations, has announced that it will ask the next Legislature to grant for the building operations and extension of equipment for the Los Angeles Medical Department, \$25,000, and for maintenance \$10,000 per annum.

The Maricopa County Medical Society enjoyed its regular fall dinner October 19th, the "deliberations" being presided over by Dr. H. A. Hughes. The titles of some of the toasts are suggestive: "How I made my first X-raise," and "I love my Pills, but oh you Appendix." Yes, they had a good time.

The hot springs in the vicinity of Gerlach, on the California-Nevada desert, are being exploited as a medicinal resort by the Western Pacific Railroad Company. Some of these springs are decidedly hot, and several are quite large, one being about thirty feet wide and a little longer and more than 650 feet deep.

We are informed that Assistant Inspector-General Glennan of the United States Marine Hospital Service will recommend the establishment of a government quarantine station at the Los Angeles harbor in time for the opening of the Panama Canal. The establishment of such a hospital must not be unduly delayed.

We learn from the San Francisco Examiner that Professor Carl von Moornden of the Imperial University of Vienna would lecture there. Such is fame!

Dr. Harriet E. Parker, medical director in the Madura Mission in India, has been delivering addresses on her work in the foreign land, to which she will soon return.

The Public Health Service has issued an order to all railroad and steamboat lines that water for drinking on trains and vessels shall be certified to as to its purity by the health authorities of the State from which it is drawn. The same rule applies to ice. Moreover, it requires that the water containers shall be scalded with steam once a week. Good.

The Southern California Homeopathic Medical Society held its twenty-second annual meeting at the Angelus Hotel October 9-10th. The following officers were elected: Dr. C. T. Low, Los Angeles, president; Dr. C. S. Orr, Ontario, first vice-president; Dr. Wilella Howe-Waffle, Santa Ana, second vice-president; Dr. R. A. Campbell, Los Angeles, secretary-treasurer.

We gladly call favorable attention to the advertisement of St. Catherine's School for Girls. Miss Thomas and Miss Mosgrove, the principals, are splendid women for this work. Physicians can send their young daughters to this school with every confidence that they will receive ideal care and training from teachers with loving, sympathetic hearts.

Dr. Minerva Goodman, health inspector for the public schools of Stock-

ton, examined 190 school children and found 42 of them afflicted with pediculosis. The "Record" looked up the scientific term in Webster and announced the garden variety of name that pediculosis is commonly known by, thus freeing an anxious public from the dread of the development of some new disease.

The officers of the Psychopathic Association of California are: Judge Curtis D. Wilbur, president; Dr. Henry G. Brainerd, Dr. Thomas Orbison, Dr. Ross Moore, Dr. James Fisher, Dr. Charles Lewis Allen, Judge George W. Hutton, Mrs. O. P. Clark, and Mrs. W. S. James, vice-presidents; W. S. James, secretary. The association is much interested in the building of a state psychopathic hospital.

The Santa Fe Railway Medical and Surgical Society, at its fifteenth annual session, held in Albuquerque, elected the following officers: Dr. J. H. Wroth, Albuquerque, president; Dr. I. F. Harter, Stronghurst, Ill., first vice-president; Dr. W. H. Wells, Coffeyville, Kansas, second vice-president; Dr. M. N. Lively, Blackwell, Oklahoma, third vice-president; Dr. M. L. Bishop, Topeka, secretary-treasurer.

The Executive Committee of the California State Board of Health has enlisted the services of Prof. W. B. Hermes, Prof. Hunt and Dr. A. K. Sawyer of the State University in an investigation of poliomyelitis. The investigation will embrace experiments upon monkeys with the stable or "biting" fly, which is attracting considerable attention as a possible etiological factor in the transmission of the disease.

What is this specialty? "Dr. M. E. Lane, a physician of Chicago, has arrived in this city with the expectancy of making his home here. Dr. Lane specializes in the administering of anesthesia, which vocation he has followed for quite a number of years. He also performs circumcision with or without the ritual, and it is his object

to establish such a practice in this city."—Los Angeles Jewish Herald.

It is reported, upon the authority of Bishop Johnson, of the Los Angeles diocese of the Episcopal Church, that the diocese has a controlling interest in the Columbia Hospital. It is proposed to discontinue the Good Samaritan Hospital, on West Seventh street, since the Columbia Hospital, at the corner of Orange and Witmer streets, will meet the needs of the church and provide more room. Mrs. Horatio Walker, Jr., will continue as superintendent at the new institution.

San Francisco, through Dr. Gunn, is planning to stamp out infection among the Porto Ricans and Central Americans there. When this is done, it is proposed to ship these people, or as many of them as possible, to the Southern California beet fields, where Miss Catherine Felton of the Associated Charities has been making arrangements for the employment of large number of them. We wonder if those critters will be really permanently cured before being sent to this region.

Under the law passed by the last Legislature, whereby a physician might be granted a certificate to practice any specific branch of medicine, provided he had practiced it 35 years, Dr. Bohannon petitioned for a writ of mandate to compel the State Board of Medical Examiners to issue him a certificate, declaring he had treated cancers exclusively for 35 years and had fulfilled the requirements of the act. The board demurred to the petition on the ground that the law was unconstitutional. Superior Judge Sturtevant sustained the demurrer.

St. Joseph's Hospital, of Phoenix, is giving its regular winter course in the training school for nurses. Lectures are given by Drs. E. Payne Palmer, Win Wyllie, Willard Smith, O. E. Plath, Louis Dysart, R. W. Craig, E. M. Baum, Cyril M. Cron, Roy Thomas, W. W. Watkins, and E. Perkins. The nurses

in training are Misses Agnes Daly, Josephine Tamborino, Mabel Traub, Aura Church, Leona Murphy, Gussie Finch, Hazel Lowenstein, Meta Anderson, Elizabeth Daly, Vivian Stewart, Hazel Church, Marguerite Zellner, Mrs. Lotz and Sisters Benedict, Aloysius, Ignacius, Raphael, Concilla and Genevieve.

Considerable comment has been stimulated in Oroville by the damage suit of J. T. Beene, a rural mail carrier of Chico, against Dr. N. T. Enloe, a prominent physician of that city. It is one of those fracture cases, in which the patient became impatient and consulted another physician, Dr. E. L. Meyers, of Chico. Later Meyers was expelled from the Chico Medical Association for alleged unethical conduct, and it is reported that he was accused of stimulating the suit against Dr. Enloe. If there is a moral, it would seem to be that physicians should be guarded in such cases. Only too often a patient is willing to sue for heavy damages if the result is not satisfactory, whereas he would pay a very small fee or none at all in the event of a most favorable outcome.

The American Surgical Association has appointed a committee consisting of Drs. William L. Estes, South Bethlehem, Pa.; Thomas W. Huntington, San Francisco, California; John B. Walker, New York City; Edward Martin, Philadelphia, and John B. Roberts, chairman, 313 S. 17th street, Philadelphia, to report on the Operative and Non-operative of Closed and Open Fractures of the Long Bones and the value of radiography in the study of these injuries. Surgeons who have published papers relating to this subject within the last ten years will confer a favor by sending two reprints to the chairman of the committee. If no reprints are available, the titles and places of their publication are desired. John B. Roberts, chairman, 313 S. 17th street, Philadelphia.

Here's something good from the Fresno Republican, under the caption "Sects and Schools:" (Referring to the suggestion by "Deacon" A. J. Pillsbury, that the State Board of Health or somebody analyze all the springs and publish a statement of what is in them and what they are good for).

The suggestion is a good one, all except one thing. To which chemical creed shall the chemist belong who analyzes the water? And to which therapeutic sect shall the health officer belong, who states what effect the constituents will have?

As for instance. Suppose the State were to appoint a commission to investigate the efficacy of baptism. The Baptists would report that nothing is baptism except immersion in adult life. Other sects would report that sprinkling or pouring is enough. The Catholics and Episcopalians would report that the apostolic succession of the priest is more important than the quantity of water. The Jews would substitute a surgical operation for the water. Some sects would prescribe baptism as a condition of salvation, while others would regard it merely as an enjoined ceremonial of reception into the fold. The Unitarians would omit it entirely. Some would emphasize the importance of baptism in earliest infancy, while others would require it to be a voluntary act, after the age of discretion. And the state commission could only report that various sects believed various things, and that nothing was determinable.

Now, if medicine is a matter of faith, creeds and sects, the same thing would apply. One sect, for instance, would determine the presence of Epsom salts in the water by the simple chemical tests by which it is identified. It would determine the probable effects of Epsom salts on the system, by the uniform experience of the billions of cases in which it has been administered. This sect, the other sects call "allopathic." But there is another sect, the homeopathic, which would test the most potent efficacy of the water by properly mixing one drop of it with a million barrels of other water, and then proving the symptoms caused by taking one spoonful of that. There is another sect, the osteopathic, which is sure that the phenomena following the ingestion of Epsom salts are caused by a concomitant dislocation of the fourth lumbar vertebra. And there are still the Christian Scientists who say it is all in your mind, anyway, and that one water will have the same effect as another, if you only think so.

Shall the State Board of Health discriminate between these sects? Shall it assert that there is such a thing as the science of chemistry and the art of chemical analysis, in the face of sects which deny both? Shall we prefer the sect which finds out by trying it what Epsom salts will do to the sects which reason from theory what it ought to do?

Not if medicine and religion are analogous, and sects and "schools" comparable.

Which is precisely the point at issue.

BOOK REVIEWS

"I OUGHT TO KNOW, I HAVE
BURIED FIVE."

Mary Austin, author of "Land of Little Rain," has a new work just out, "A Woman of Genius." In this story she points out most effectually the wrongs that grow from the lack of instruction in regard to maternity and other responsibilities that the young girl must assume in marriage and its sequences.

She tells how, in the girlhood of the heroine, instruction along these lines was considered indelicate.

"Somewhere out of this prospect of sympathy and understanding arose upon you the tremendous inundation of Life. Dimly beyond the point of Tommy's joyous possession of me, I was aware of an incalculable Force by which the whole province of my being was assailed, very different from the girlish prevision of motherhood which had floated with the fragrance of orris root from Aunt Alice's bureau drawer in the Allingham's spare room.

"I don't say this is the way all girls feel about the approach of maternity, but I saw it then like the wolf in the fairy tale, which as soon as its head was admitted, thrust in a shoulder and so came bodily into the room and devoured the protestant.

"You must imagine for yourself from what you know of nice girls thirty years ago, how inarticulate the whole business was; the most I can do is to have you understand my desperate need to know, to interpose between marriage and maternity never so slight an interval in which to collect myself and leave off shrinking. . . .

"I scarcely recall now all the reasons why it was thought best for me to go back to my mother in August, and to the family physician, but I find it all pertinent to my subject. Whatever was done there was mostly wrong,

though I was years finding it out. I mean that whatever chance I had of growing up into the competent mother of a family was probably lost to me through the inexactitudes of country practice. We hadn't then arrived at the realization that the well or ill going to maternity is a matter of sceptics rather than sentiment."

After childbirth she shows how the baby and the mother, too, suffer from lack of intelligent instruction.

"My baby, too, poor little man, was feeble from birth, a bottle baby; the best that could have been done would hardly have been a chance for him. Lying there in the hot, close room, all the air shut out with the light, in the midst of pains, I made a fight for him, tried to interpose such scraps of better knowledge as had come to me through reading, but they made no headway against my mother's confidential 'Well, I ought to know, I've buried five.'"

She also wisely speaks of the village method of postponing sending for the doctor.

"It was a common practice in Tay-lorville never to send for the doctor until you knew what was the matter with you. So long as the symptoms failed to align themselves with any known disorder, they were supposed to be amenable to neighborly advice, to the common stock of medical misinformation, to the almanac of some such repository of science; and though this practice led on too many occasions to the disease getting past the curable stages before the physician was called, I never remember to have heard it questioned.

" 'You see,' people remarked to one another at the funeral, 'they didn't know what was the matter with her until it was too late,' and it passed for all extenuation.

"Marriage is the one thing that society won't take the trouble to learn the truth about. My baby, you know, I lost him because I didn't know how to take care of him, and there was nobody at hand who knew much more than I. But Effie's last baby came before its time and they saved it by science, by knowing what and how. Why can't there be a right way like that about marriage, and somebody to discover it?"

"A Woman of Genius" is much more than a work of fiction. It deals with a great problem in regard to the sexual relation, and every physician who reads it will find that it will get a grip upon him almost from the beginning. L.

THE BLOOD OF THE FATHERS. A play in four acts. By G. Frank Lydston. The Riverton Press, Chicago, 1912.

You know Lydston? Well, this is a play written by him, dealing with the heredity and crime problem. It is fascinating. And it contains a fund of common-sense observations. Here are some enjoyable extracts that are illuminating:

"We go on marrying and giving in marriage criminals, lunatics, epileptics, inebriates and syphilitics and breeding more of their kind! We go on hanging and jailing criminals and ignoring the children from whom criminals are made. We go on paying out for the cure of crime and its evil congeners more money than we spend for our children's education! We go on with maudlin sentiment and savagely oppose practicality and common sense in matrimony—society's very corner stone! And we pretend to be an intelligent social system!

"Love is not a bad guide—to the jail, the asylum, the hospital—and to Reno. When love comes in at the door, reason flies out of the window. Love is the greatest transmuter of human base metals. With his magician's wand and a skill that Hermann himself

might have envied, the little blind god blithely transforms an epileptic, a gonorrhoeic, a lunatic, an imbecile, an inebriate or a criminal into a rosy ideal.

The intellectual side of this soul-mate and affinity business is largely bunk, anyhow. It's a lame excuse some people give for primitive instincts.

"Hartwell admitted having had two sweethearts—'one, the girl I was going to marry when I grew up; the other the same girl grown up.'

"Bad nutrition, bad heredity, dirt and social imbecility are the devils that underlie crime.

"Every child has a right to be well born and we must help him to come into his own. He can't select his own parents, hence we should do some selecting for him. It is for society to say whether the marriage license shall be a ticket to hell for souls unborn. . . . Some parents have no right to have children."

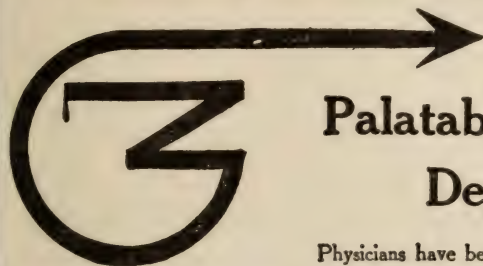
The play ends with a tragedy that we hope will not be productive of harm. Surely there are other methods than suicide for the prevention of the propagation of the undesirable blood of the fathers.

A MANUAL OF PHARMACY FOR PHYSICIANS. By M. F. DeLorme, M.D., Ph.G., Assistant Professor of Materia Medica and Pharmacology, Long Island College Hospital, New York. Third edition, with 19 illustrations. P. Blakiston's Son & Co., 1012 Walnut Street, Philadelphia, 1912. \$1.25 net.

This is a convenient little volume, resembling in size and binding Stitt's bacteriology. Quoting the American Medical Association's Handbook of Therapy, the following criticisms are given of the exclusive use of the United States Pharmacopeia and National Formulary preparations:

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patients would thus be deprived of valuable remedies.

"2. Many of the Pharmacopeia and National Formulary preparations are imperfect in their make-up, and are poor imitations of proprietary preparations.

"3. Some products must be ordered by proprietary names, and hence consistency is broken in favor of certain firms."

It is a small, concise textbook, presenting the parts of Pharmacy that are of especial interest to medical men.

MORTALITY STATISTICS 1909. Tenth annual report with revised rates for the intercensal years 1901 to 1909 based upon the census of 1910. Department of Commerce and Labor Bureau of the Census, E. Dana Durand, Director. Washington, 1912. Government Printing Office.

Congress has been criminally negligent in delaying the publication of

these mortality statistics for three years. It is an old antiquated mass of figures, that is now chiefly of historical interest. Where are the figures for 1911?

MUSCLE SPASM AND DEGENERATION IN INTRATHORACIC INFLAMMATIONS. Their importance as diagnostic aids and their influence in producing and altering the well-established physical signs, also a consideration of their part in the causation of changes in the bony thorax, and

LIGHT TOUCH PALPATION, the possibility and practicability of delimiting normal organs and diagnosing diseased conditions within the chest and abdomen by very light touch. By Francis Marion Pottenger, A.M., M.D., LL.D., Medical Director of the Pottenger sanatorium for Diseases of the Lungs and Throat, Monrovia, California. Sixteen illustrations. C. V. Mosby Company, St. Louis, 1912. \$2.

Pottenger almost makes you believe that he can feel a thought by external light palpation of the cranium. For instance:

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Nuf ced.

The Pessimism of Buddhism: Metschnikoff has pointed out that Buddhism is full of pessimism. "Birth is sorrow, old age is sorrow, illness is sorrow, death is sorrow, being tied to what one does not

like is sorrow, separation from what one does like is sorrow, not to obtain one's desire is sorrow." * * * Similarly the old Indian poetry of Bhartrihari laments: "The life of man is limited to 100 years; night occupies half of it; half the other half is absorbed by childhood and old age; the rest is passed in the midst of diseases, separations and adversities, in waiting upon others and similar occupations."

It is just that the cost of preserving the public health should be met by a tax upon the people generally. We do not depend upon private enterprise for the defense of our seacoast from foreign foes or for the prevention of infectious diseases among our hogs and cattle. Why should we depend upon the altruistic efforts of a few citizens of the Republic and the munificence of a Henry Phipps or a John D. Rockefeller for the extinction of tuberculosis and hookworm disease?

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For the benefit of physicians in this city feeling the need of a speaking knowledge of Spanish, there is being started a Conversational Spanish class by Miss Martina Case of Chihuahua, Mexico. The term of lessons will cover 15 weeks, to meet two evenings a week in a central location. Those desiring further information may address Miss Martina Case, 211 E. Lime Ave., Monrovia.

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Editor,
DR. GEO. E. MALSARY.

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ADDRESS OF THE REV. WILLIAM H. FISHBURN, D.D.,

PASTOR OF THE WEST ADAMS PRESBYTERIAN CHURCH OF LOS ANGELES, CALIFORNIA. DELIVERED BEFORE THE SOUTHERN CALIFORNIA MEDICAL SOCIETY WEDNESDAY EVENING, DECEMBER, 4, 1912.

Mr. Chairman and Gentlemen:

It is a privilege to stand here and look in your faces. It is an honor to any man to be permitted to address this instructed assembly, The Southern California Medical Society.

They say in San Francisco that you "can always tell a Los Angeles man, but you can't tell him much." You, gentlemen, are to be congratulated on your fine Medical Association, a feather out of the wing of that almost omnipotent organization, the American Medical Association, the A. M. A., which, however, is looked upon by some, who can see farther than you suspect, as the M. A. M., the real and veritable M. A. M. that will one day be fatally malicious to fraud and hoax and humbug in every form.

I congratulate you, sirs, upon your well-polished and well-oiled mechanisms like your County Medical Society; your Clinical and Pathological Society; and your various groups for special study, which ought to make the practice of medicine in this rare climate a dream and a delight. I felicitate you on your Barlow Medical Library, open to all of you, maintained by the few for the benefit of the many. I give you praise for the time you give, and give freely, to the County Hospital and the free dispensaries of our city. I praise you without stint that you are giving of your money and your energy for the prosecution of illegitimate practitioners, quacks, charlatans, fakers, Chinese posers, abortionists, and every form of imposture.

Mr. Henry Watterson somewhere says that when any humbug in the country "thinks it has the world in a sling, public opinion just rears back on its hind legs and kicks it out." There are organizations in this land and in this city like the League for Medical Freedom, and another organization which I shall speak of presently, which "think they have the world in a sling;" and the flexors are about to let go, and the extensors are about to be stiffened with explosions of carbon-dioxide—because the vast, resounding kick is about due and payable.

It is appropriate that the minister should talk to the medical profession. Two brothers, twin brothers, have walked side by side since the dawn of human story. Wherever we look in our history books we can see those twin brothers walking down the dim pathway side by side. They have walked thus together for tens of thousands of years, maybe, the priest and the doctor. They have walked ever at the head of the endless procession of humankind, these twin brothers. They have climbed together hand in hand the "toilsome, slow ascent of the long curve leading upward to civilization." They stand elbow against elbow today. They are looking upward with fixed eyes toward the sublime heights whose peaks are catching the morning splendor of the coming sunlight. Not until they touch with tired feet the topmost crag, and look down enraptured upon the glories spread out beneath, shall either of them pause in his upward climbing.

Sometimes they have been "brothers-in-black," these twin men, going onward with veiled faces crooning mysterious songs, pretenders both, priest and physician; but more frequently they have been brothers in white, sons of the morning, humble men who honestly did their best as God gave them power to know. Look where you will in the picture books of the long past,

the stone-graven books of old Babylonian, old Assyrian, old Sassanian, old Egyptian—the twin brothers march side by side. (May I say here, "What God hath joined together through so many hoary ages, religion and medicine, let not man put asunder?") They have seen the unfolding, through the centuries, of the Great Plan, and they have seen that unfolding with the same eyes—eyes half-closed with hypocrisy sometimes; but eyes wide open and big with awe and wonder the more part of the time.

The science of the physician, like the science of the priest, has grown. It has unrolled, unfolded, evolved. Beginning with alchemy, and astrology, and the star-chart, and the astrolabe, it has cleared its eyes of the smoke, and has grown to the majestic system it is today. There came a time, according to your evolutionists, when the man broke away from the brute. He may have been for ages what Nietzsche calls the "big blond beast." The poet tells of the loneliness of early man when he tore himself away from the environment of the beasts, and felt within him that he could not forever be a beast:

"With hopes half born, with burning
tears unshed,
Bowed low his terrible and lonely head;
With arms uncouth, with knees that
scarce could kneel
Upraised his speechless, ultimate ap-
peal;—
Aye, and Heaven heard, and was with
him and gave
The gift that made him master and not
slave."

Not only did the man break away from the brute, but the man who thinks broke away from the man who could not or would not think. You cannot trace clearly the growth of man from the brute; but you can trace with approximate clarity the growth of medical knowledge, medical skill, medical

culture. Books are in your hands that supply the links to reconstruct the chain that binds the physician of to-day who sits on morocco in the midst of his mahogany furnishings with the primitive savage who sat in a cave with scarred cheeks and bloody hands, and soothed away the hurts and aches of a superstitious but believing people. In our brief time we must leave the cave-man practicing early medicine in the cave's mouth, for a study of him would take us too far afield.

Let us look into only one book, going back only two and one-half centuries. It is "the art of distillation and alchemy," by J. French, doctor in physick, published in London in 1659. It was a popular book amongst the learned physicians of that period. In it I find the methods of manufacturing various remedies such as "Elixir of Mummies," "Essence of Man's Brains," "Spirit of Human Skulls," "Eye Water of Woman's Milk," "Balsam of Bears' Feet," "Water of Sperm Frogs," "Wine of Fat Vipers." Under the heading, "Essence of Man's Brains" we read: "Take the new branes of a young man that hath dide a vilent deth, together with its veins, membranes, and arteries, and nerves, together with all the pith of the backbone. Bruise them in a stone mortar till they become as a kind of papp; then put as much of the spirits of wine as will cover three or four fingers' bredth; then putt it in a large glass that three or four parts be empty, sealed hermetically; then digest it half a year in Horsse's Dung; then take it out and distil it in Balneo; then cohobate (What is it to cohobate?) the waters till the gratest part of the branes be distild off." "A scruple or a drop or two is a most infalible Remedy against the Falling Sickness."

I spare you further quotations from this book that was once ranked, and that only 250 years ago, amongst the sanest and wisest books in the world. You can read in your Galea and your

Alenander of Tralles, and other writers, of the marvelous cures wrought by marvelous methods. One old writer tells how Mammolus was cured of stone in the bladder by sleeping all night in St. Andrews Church at Pateras; and another writer tells of Fedamia, paralysed for eighteen years, who was cured by sleeping in the Church of St. Julian of Brionde. (This ought to make it clear to a clergyman that it is purely for pathological reasons that people go to sleep under his preaching.)

You read of a powerful medicine known as Tombstone Powder, made of dust scraped from the tombstones of the Saints. Gregory of Tours advised the patients to lick a tombstone, declaring that himself was cured of a tumor of the tongue by licking the iron railing around the tomb of St. Martin. (There, sirs, is homeopathy, the infinitesimal doses, beginning away back in the middle ages).

Writers tell of the medicinal value of the charred wick of candles which had been burnt in churches; and of a sure cure for rheumatism by swallowing drops of the water in which the sacred vessels of the church had been cleansed. A favorite prescription for the cure of boils and blanes three hundred years ago was "Grease from the 'tale' of a black catt killed in the dark of the mune."

You know of the cures wrought in modern times by touching the bones of St. Anne; but it is reported that, when the bones of the deceased lady could not be procured, the bones of a goat were substituted surreptitiously, and the cure was just as immediate and just as complete.

What frightful mixtures our ancestors swallowed. I read page after page of the ancient prescriptions the other day, read until my cardiac orifice bumped against my ordiae orifice;—but I became possessed just then of a dreadful suspicion—that my physician,

Dr. William Duffield, is using those formalae on me when he gives me a mixture that tastes like a combination of Epsom salts, axle grease, furniture polish and backache pills.

Those doings of men in the middle ages were not humbug. The best men in the earth believed them as I believe in the Gospel of St. Luke. They were pardonable,—nay, they were justified by the dimness of the light that was in the world during that period. But there are frauds and impositions practiced on the people in our day that are not justifiable, that are not even pardonable. The quack of today is not a survival of the middle ages. He is not a recrudescence of the doctors of the long ago, for they believed in their nostrums, and he knows better.

Your modern book, "Nostrums and Quackery," published by the American Medical Association, deserves a far wider circulation than it is having. You ought to provide fund to circulate it gratis to everybody that can read in the United States! It exposes quackery as it has never and nowhere been exposed before. And quackery needs to be exposed. The people believe in quacks. They love quacks. They like to hear of people who had the same ailment they have, and got well by using one or other of the advertised cures. They read the testimonials and wonder at them. They like to wonder. It is easier to wonder than it is to understand.

People like the marvelous. Your newspapers reported the other day the case of a Mexican woman who stood before a church in Mexico and mocked. Thereupon she was instantly struck by lightening and turned to stone. The priest, with an eye to business, has placed the petrified lady in a room in his house, and is permitting the devout and faithful to look on her stone face for fifty cents a look. (That is one case, but not the only one, in which

the priest brother is as guilty of quackery as the medical brother).

You are living, gentlemen, in the time of the most wide-spread religio-medical fraud that ever was sent forth amongst the people. Somebody says, "This world is getting all cluttered up with fools." Doubtless it is. The modern mania is Eddyism, to give it its proper name. If you could use that name, Eddyism, and that name only in speaking of it, you would wound it in the head. Have you read Mrs. Eddy's book? I have. But I would rather break stone, I would rather saw wood, I would rather beat carpet, than read it again. The eagerness with which many have gone after this wild fad does not elevate one's respect for the worth of popular opinion.

In our time nearly everybody imagines himself to be a deep thinker, and the multitude believes itself to be studying veritable psychology while mooning over the illiterate drivel of the so-called new thought books.

This new religious fad is attractive to the half-baked mind. It appeals to the same class of mind that believes that Bacon composed Shakspeare's dramas. Eddyism is not a religion, it is a disease. To be sure, some of the "best" people catch it; but, also, some of the "best" people are in the lunatic asylums. All of this does not prove that they are more nearly right than their neighbors; it only proves that they are more crazy than their neighbors.

I have discovered the bacillus of Eddyism. I am sure Dr. Stanley P. Black will pardon me for invading his department of bacteriology to this extent. You know there are rod-shaped bacilli, comma shaped bacilli, and so on, so minute that it requires a twelfth-inch oil immersion to see them. But sitting at my desk I have discovered the bacillus of Eddyism without the aid of a microscope. The bacillus of Eddyism is yellow, perfectly circular in

shape, has a diameter of about one and one-fourth inches, has a milled edge, and when you let it fall it rings like metal. (I regret that I have not one of these golden yellow bacilli in my pocket at this moment).

How did Eddyism get into the world? It is here, and here with some emphasis, but not with the emphasis some of you suspect. There is no reliable census of the Eddyites. There seem to be more of them than there are.

You have heard of the farmer who heard the croaking of frogs in his pond. He went to the steward at a summer hotel and signed an order to deliver a ton of frogs during the summer. He never turned up that summer. When asked the following year why he didn't deliver them he answered, "Huh! There were only two frogs in that pond, but from the noise of them I expected to find a million."

But, large or small, Eddyism is here. How came it here? I am afraid I must confess that the churches have helped to bring it here; I am afraid I must say physical science in its materialistic trend has helped to bring it here; I am afraid I must say that the constructive atheism that prevails in many doctor's offices has contributed to bring it here.

Your studies and investigations lead you to look upon the body as a machine, a mere mass of matter, which it indubitably is. But you forget what you ought to say, and what the common people want to hear you say, that there is a force running that machine, and that force is alive and conscious, and, in the human structure, that force may be so organized as to survive even the shock of death, and to live on as a conscious entity.

In my department of study we call that force the soul. And, sirs, with all your studies you have been able to find no other key than the soul key that comes more near to picking the lock of the great life puzzle.

There is a class of patients, the neurotic, that become a pest to every regular practitioner. The nerve patients become a "joke" in many offices. They are not a joke, they are a gold mine, and the unscrupulous and ignorant Mrs Eddy saw it and seized it, and washed it as pay dirt, and she and her followers have made millions out of it. Mrs. Eddy is not satisfying them. You know that, you who are called in to tide hundreds of them over the agonies of the last hours of life. But you, you with your knowledge, you can satisfy them if you will. It is quite learned to talk to them of afferent and efferent nerves, of end plates and axis cylinders and the sheath of Henle. But that is not all they want.

And you educated men ought to read in the eager faces of your patients the hunger of the human heart for ultimate truth, and their souls' great yearning after the help that comes, not from your medicaments alone, but from the invisible one whose hands move in the silences.

Men and women are not bubbles blown, they are not atoms and drifting dust to be reabsorbed in the final catastrophe, and the people know it; and you must bend your wise heads and get back again as you were once before into the deepest hearts of all the people.

I am not here as a propagandist; but it is my conviction that the physician who will succeed in the days that are to come must be a religious man.

"Oh, could I tell, ye surely would believe it!

Oh, could I only say what I have seen! How should I tell, or how can Ye receive it,

How, till He bringeth you where I have been?

Whoso hath felt the Spirit of the Highest

Cannot confound nor doubt Him nor deny;

Yea, with one voice, O world, though
thou deniest
Stand thou on that side, for on this
am I."

I believe what I believe, but I do
not thrust my personal belief on you.
You are as free to choose your solution
of this problem as I am to choose mine.

I wish I had time to speak of what
you, gentlemen, as a profession, have
done and are doing for the world. To no
other section of human effort should I
give more praise than to the section
you represent. What you have done is
immense. What you have planned to
do through your great institutions of
research endowed with millions of
money appals the mind. What you are
doing in your days of toil, in your
nights of sleeplessness, the world can-
not sufficiently thank you for or pay
you for.

Your faces are forward. You are
looking for the brighter day to come.

You are going on towards triumph. You
are moving towards the dawn.

"Lo, for the dawn, (and wherefore
dost thou screen it?)

Lo, with what eyes, how eager and
alone,

Seers for the sight have spent them-
selves, nor seen it,

Kings for the knowledge, and they
have not known."

But you are going to see it. You
are going to know! For thousands of
years the race has been stumbling and
blundering upward. The night has been
long, but with the old seer we are able
to say: "The morning cometh!" The
light of an exact science, better, and
broader, and more wholesome than any
we have ever known, is slowly but
surely approaching. The twilight is
passing, and in the eastern sky we can
see the golden streaks of the great
morning which is about to break over
the world.

A REVIEW OF THE WASSERMANN REACTION.

BY SAMUEL LEVIN, PH.G., PH.C., BACTERIOLOGIST AND CHEMIST, NAPA
STATE HOSPITAL, NAPA, CAL.; FROM THE LABORATORY OF
THE NAPA STATE HOSPITAL.

The voluminous and much instructive
literature which in the past has been
presented to the profession relative to
the Wassermann reaction, though of aid
to a more thorough understanding of
the classic test, has created considerable
confusion amongst those who are not
familiar with the essential principles of
the Wassermann reaction.

The much valuable information which
has been obtained through the means
of scientific observation has not only
stimulated the ambition of the beginner
but has retarded to a certain extent its
undertaking by many. Because of com-
plications and difficulties which are
often met with in doing the Wasser-
mann test, the opinion is becoming
wide-spread that the Wassermann reac-

tion is such a tangled-up undertaking
that only a limited number of fortu-
nates are able to solve its mysteries.

It is true that the Wassermann test
is not a mere combination of reagents,
that by bringing definite solutions to-
gether a complete reaction is the result.
The Wassermann test is a biologic re-
action and as soon as one has attained
a knowledge of its principles, with a
thorough knowledge of allied subjects
together with a considerable amount of
experience and practice, one can read-
ily master the test. Should it happen
that unsatisfactory results are secured,
a worker with proper understanding
and observation can readily interpret
the source of difficulties and easily rem-
edy the same.

Considerable mention and attention have been given the different reagents that enter into the Wassermann reaction. Experience will soon teach how to judge the efficiency and reliability of a particular reagent, and with new suggestions and perfections of many investigators, the Wassermann test does not become an irksome and difficult undertaking, but simple and readily carried out. At the start, to the beginner many confusions will arise and he will not be able to proceed with the test. This in most cases is due to the complement which may be lacking in quality and strength. When an Antigen or Amboceptor have been once qualified as perfect, with proper care, no difficulties will be experienced with them.

The complement is the most important and only reagent which causes much trouble and it is one about which little mention has been made.

The chief purpose of this paper is to call attention of those who intend doing the Wassermann reaction, to the fact that the complement should be guarded as to its efficiency. Its quality must be established before use.

Oftentimes a good complement will vary in strength. Often the temperature of the day will influence its power. The complement in many instances is not fit to be used in the test. But all these faults can readily be eliminated by testing the quality of the complement before using it in the test proper, thereby insuring the reliability of the Wassermann reaction.

It is surprising how many laboratory workers are overlooking the value of testing the quality of the complement before making the test proper, and with enthusiasm are complaining of the difficulties that are connected with the Wassermann reaction. The consequence is, that because of this miscomprehension they are misrepresenting the Wassermann reaction and are passively reflecting upon the abilities of other workers. The worst of all is that many

of the members of the profession who with zeal have had confidence in the Wassermann reaction, are unjustly beginning to lose faith in its reliability.

To the experienced worker all of the difficulties that may be met in the Wassermann reaction as mentioned above, may be eliminated, though at the same time it is a fact that many of those who claim to be proficient in the Wassermann test and who have made many of these tests, owe their unexplainable misfortunes and difficulties of the Wassermann test to the complement used. Some use a bad complement and expect to get definite results, whereas by knowing the correct quality of a given complement the difficulties could be entirely eliminated.

To illustrate, the following incident was observed by the writer in one of the foremost teaching hospitals in California where the number of Wassermann tests made reach as high as 100 and 150 tests a week. The pathologist being trained under Wassermann himself, by trying to economize has used the complement of a guinea pig, which was injected for tubercular diagnosis. Over 50 tests went bad. The blame was placed upon the salt solution. Another guinea pig was killed and its complement used in the new test, but the test did not work. The amboceptor was thought to be at fault, and so several amboceptors from different sources were obtained, but to no avail. Only then did suspicion fall upon the complement and a new guinea pig was used and the test worked well. As stated above, the first guinea pig was sick, consequently its complement was not fit to be used; the second guinea pig was taken from a bad lot and the result was the same; the third one possessed a good complement and the test worked satisfactorily.

At the Napa State Hospital, fifty guinea pigs died eating cabbage which was sprayed with an arsenical compound to destroy vermin. Three guinea

pigs in apparently good health remained alive. A sheep-rabbit's amboceptor was in preparation and as a matter of curiosity its titration was tried with the complement of these three guinea pigs. The highest titration obtained was 1-150. A new lot of guinea pigs were ordered and the same amboceptor tried and gave a titration of 1-3600. These illustrations emphasize that the complement is one of the most important reagents which enter into the Wassermann test and one which should be constantly controlled. Many times, though the complement is of good quality, it will greatly vary in its power and will influence the titration of a given amboceptor. Although the amboceptor is apt to become weak, it depends largely upon the strength of the complement. With a powerful complement a much higher titration of amboceptor will be obtained, with a weak complement, the amboceptor will be greatly lowered in power. When the quality of the complement is established before using it for the test, the patient's serum, which is usually very valuable because of the small quantity sometimes obtained, will be saved, less work will be needed and great control as to the reliability of the test will be obtained.

From the foregoing it appears to the writer that the greatest importance, namely, the quality of the complement, must be found out each time a new

guinea pig is used; first, as to its quality; second, as to the quantity to be used; third, as to the valuation of its influence on the amboceptor. In other words, the Hemolytic System must be controlled in every respect. The amboceptor and complement must be titrated each time a new guinea pig is used.

It is the writer's custom to kill two guinea pigs on the day the Wassermann test is made. If the amboceptor has been found to give a titration of 1-2000, dilutions are made of the amboceptor of 1-1750, 1-1900, 1-1200, 1-2100 and 1-2500. This procedure takes several minutes during incubation, and goes on with the separation of the serum to be tested and inactivation. After obtaining the results, the complement is standardized and the test proceeded with.

By taking a little more time, the quality of the complement is established, the titration of the amboceptor found, and the value of the Hemolytic System is known.

To one who is not familiar with the technique of the Wassermann reaction, the test seems to be a most tiresome undertaking, but should one have the facilities and reagents of high standard, the test is very simple, does not consume much time, and the results are easily interpreted.

I wish to express my sincere thanks to the medical staff of the Napa State Hospital for their many courtesies which made this paper possible.

TREATMENT OF GONORRHOEAL RHEUMATISM.

BY C. WORTH NORTON, M.D.

In describing the treatment of gonorrhoeal rheumatism it is advisable to divide the treatment into that of the acute and the chronic cases.

The acute form of rheumatism is at first a pure gonococcus-septicaemia, with occasionally a staphylococcus and rarely a streptococcus, or colon bacillus infection added. All acute cases are forced

to take to bed and remain there until the fever and stiffness in the joints and tendon sheathes subside.

The diet of these cases should be practically liquid, with plenty of citric acid in the form of lemonade. This organic acid is converted in the intestinal tract into carbonates which render the urine alkaline and allay the

underlying urethral condition. Potatoes and other starches are particularly contra-indicated, as these articles tend to produce suppuration or increase the same if present.

The medical treatment should begin with a preliminary cathartic which should be repeated on each second day. Opiates are seldom necessary to control pain. Aspirin should be used in this disease to control pain. The dose should be from ten to thirty grains of Bayer's aspirin, according to indications, repeated every two hours until the pain is under control. At the beginning of the joint involvement, and when the condition is due purely to the gonococcus, quinine is almost a specific. Five grains given four or five times a day, up to the symptoms of intoxication, will in a great many cases within forty-eight hours reduce the swelling and pain to such an extent that the patient often wants to leave the bed. Quinine does not act so well when the urethral cultures show mixed infection.

The results of the proper vaccine or bacterin treatment of these cases are almost magical. Bacterins give better results here than in chronic cases, and in my opinion should always be used in acute cases. The autogenous bacterin is to be preferred. For acute sick cases the following method of obtaining cultures gives good results: Male cases after cleansing the front inch of the urethra the patient voids into a sterile centrifuge tube, and this specimen is centrifuged and the pus and debris spread, together with some of the patient's blood from the finger, over the surface of glucose-agar in a flat bottle or tube. Female cases: cultures are taken from the cervix, urethra and urethral glands. Often the staphylococcus alone is recovered from the female urethra while the cervix culture may show gonococci. Or the gonococcus alone may be found in the urethra or secretions from the urethral glands. The colon bacillus is frequently found

in female cases, as it is present in about one-half female bladders. The gonococcus, hard to cultivate, does as well on this medium as it will on anything outside the body. This culture is incubated from sixteen to forty-eight hours, commonly twenty-four hours, and the bacterin prepared. The pus, mucus and broken down epithelial cells do no harm and may be removed by filtering through cotton. It is sometimes better to kill this bacterin by making it up in five percent. phenol, keeping it on ice twenty-four hours, and then diluting to one-half percent. phenol content. This generally gives more potent bacterin than one killed by heat. If the culture media is upon the side of a two, four or six ounce bottle the growth will be practically a plate culture, and the morphology of the infecting and contaminating organisms may be studied. A slight contamination is not of much importance.

The initial dose of bacterin should be large. In a simple case, three hundred million gonococci. If staphylococci are present, the initial dose should contain about five hundred million. Colon bacilli if demonstrated in the culture should be incorporated in the bacterin, and about fifty million given with the first dose. A moderate reaction will ensue. The pain in the joints is immediately better, and there is apparently no clinical negative phase. If the reaction is slight half the dosage should be repeated within twelve hours. It is commonly the second dose which produces a severe reaction; therefore I prefer to give the larger dose first, and increase gradually from the second dose. The arms and sides of the thighs should be kept red with fresh reactions. Tincture of iodine gives the best local antiseptic protection over the sites of injection. The bacterin should be given every twelve to twenty-four hours until the pain is practically gone. Then the intervals of dosage should be lengthened.

Local treatment: Simply wrapping the joint in cotton and splinting it gives about as good results as any other method of local treatment. The cautery and dry heat are of great benefit where they can be used. Dry heat does not kill the gonococci in the tissues as it will raise the temperature of the tissues beneath the skin only a few degrees; but it produces a local hyperaemia which causes leucocytosis and increased phagocytic action in the joint.

All these acute cases should be treated as much as possible at the site of the primary infection. As the point of entrance in the male is generally the posterior urethra, instillations of from one-half to three per cent. silver nitrate should be made. The bladder should always contain urine so that any overflow from the posterior urethra will immediately be neutralized by the chlorides. Silver will do no good in the bladder, as the gonococcus does not grow readily in the bladder.

In females the cervix should be packed daily with a one per cent. silver trailer, and the urethra treated with one-half per cent. silver.

The question will arise in acute cases as to whether too much bacterin will not endanger the endocardium and cause localization of the gonococci at that point. I have never seen an endocarditis develop after bacterin had been started on a case. Rapid heart action calls for an ice bag over the precordium.

The chronic form of gonorrhoeal rheumatism is a toxæmia, the primary focus of which, in the male, lies in the posterior urethra, seminal vesicles or prostate, or in all of these structures combined. Occasionally one sees chronic rheumatism the result of a chronic anterior urethritis. Chronic cases often follow the acute cases, especially where a bad mixed infection exists in the urethra. Cases beginning as chronic cases, that is without the swelling, redness and complete disability of acute cases are quite common and are due almost

entirely to the different varieties of the staphylococcus. The colon bacillus is occasionally found combined with the staphylococcus. The prognosis of all chronic forms is good, except in foot cases complicated by flat-foot. Flat-foot may pre-exist but commonly follows prolonged infection of the small joints of the foot. All chronic foot cases should be X-rayed and spurs and other lesions treated surgically.

The diet in these cases is the diet of the ordinary case of posterior urethritis. Smoking should be especially forbidden, as a close relationship exists between a pharyngeal hyperaemia and the posterior urethra. Alcohol is prohibited. All cases should drink plenty of water between meals. In the line of general medical treatment the following prescription has given good results:

Sod. & Pot. Tartrate.....	2 ounces
Sod. Phosphate.....	1 ounce
Artificial Carlsbad Salt.....	2½ ounces
Water enough to make.....	8 fluidrams
Boil, filter and add	
Urotropin	2½ fluidrams
Sod. Iodide	2 drams
Sign. One tablespoonful in glass of water every morning one-half hour before breakfast.	

This prescription insures one or two loose movements a day and seems to help the urethral and joint condition. Aspirin, as in acute cases, acts very well for the control of pain in chronic cases. Quinine is valuable only in tonic doses. The main reliance is placed upon the bacterin treatment and upon the proper treatment of the primary focus. The cultures may be obtained in the same way as in acute cases, with additional massage of the vesicles and prostate. A very good way of obtaining cultures is to cleanse the front urethra and massage the contents of the vesicles and prostate directly into a flat agar bottle or tube, add a few drops of sterile human blood and incubate. It is not always essential to grow the gonococcus in these cases even if it is present; and it generally is not when the case is of six months' duration. In chronic cases it is the staphylococcus

and other organisms which produce the destructive lesions in the urethra along with the joint symptoms, and not the gonococcus. If a bacterin prepared in this way gives negative results, it is sometimes a good plan to have the patient urinate into the flat agar bottle, incubate the same for from thirty minutes to four or five hours and pour off the urine. The pathogenic organisms will adhere to the agar, and these are now incubated for from sixteen to twenty-four hours. This is a good method for growing the small staphylococcus which is often present in the urine in rheumatic cases other than those of urethral origin. The initial dose of the bacterin should be very large. Staphylococcus two hundred and fifty to a thousand million. The gonococcus one hundred to five hundred million gradually increasing to fifteen hundred million. The streptococcus and colon bacillus if demonstrated fifty million each increasing the dose cautiously. After the first dose the more recently involved joints are greatly improved, while the older joints in which stiffness and pain may have been worse previously are reactivated and made slightly worse. With two or three doses of the bacterin given at intervals of from twenty-four to seventy-two hours, according to the systemic effect, the stiffness and pain in both the old and the new joints are much improved. The patient feels better in a general way. In order to get the beneficial results of the bacterin the circulation must be kept full of it, irrespective of previous teachings along these lines. Practically all patients feel better during the time when one would naturally suppose that they would feel worse, that is during the negative phase. In fact, I might say that there is apparently no clinical negative phase in these chronic urethral rheumatisms except when very large doses of streptococcus or colon bacillus are given. Bacterin in these cases seems to act more like a cur-

ative serum. Occasionally no benefit is derived from the bacterin along with local treatment. Another culture should be taken and the bacterin prepared again. Very often a moderate dose of colon bacillus given with the bacterin will improve the effect of the latter, even when the colon bacillus is not demonstrated in the cultures. Any good stock colon bacterin will suffice.

The great disadvantage of the bacterin treatment is that the general practitioner thinks the one weapon against the disease is in the bacterin bottle and he naturally neglects the urethral treatment, which is fully as important as the hypodermics. The urethral treatment should consist of prostatic and vesicular massage, dilation, irrigation and instillation.

The prostatic and vesicular massage should be given twice a week. At least three minutes should be given to this form of treatment, which should be done very gently and thoroughly. Occasionally with new cases no secretions appear at meatus until after a few treatments. This condition is frequently noted and is probably due to obstruction of the glands. After this is overcome, secretion and exudate should be obtained from the urethra with each procedure. The treatment becomes less painful after the local condition is improved. This form of treatment causes systemic inoculation of toxins, which will finally give rise to an acquired immunity.

Dilation is best given by means of an urethral dilator in place of a sound, as it is unnecessary to dilate the front part of the urethra. Dilation will not accomplish much unless given for at least five minutes by the watch. Kohlman dilators are preferred. Their passage is practically painless.

The irrigation of preference is silver nitrate of strengths of one to thirty thousand to one to a thousand. These

irrigations as a rule do not give the beneficial effects of instillations.

From one-half to four per cent. silver nitrate is used in these cases for instillation, every four to seven days. If the bladder contains some urine one can give plenty of instillation without any bladder tenesmus. This is better than injecting simply a few drops, as considerable of the nitrate is immediately

converted into chlorides, even with a clean urethra.

The local joint treatment should consist of baking, the application of the actual cautery, and massage.

Finally, to prevent joint recurrences, the posterior urethritis, seminal vesiculitis and prostatitis must be cured clinically as well as bacteriologically.

612 Consolidated Realty Bldg.

CARBUNCLE.

DR. H. E. STROUD, LOS ANGELES.

In looking over the cause of death we are forced to acknowledge that some lives are lost that might be saved if the proper and prompt means was instituted.

Delay in many cases means death especially in appendicitis, mastoiditis, and in the writer's opinion, in carbuncle. If we consider the dense structure of the back of the neck, it is apparent why we have a diffused suppurating mass that only points after these rigid tissues fairly decompose. A condition which, treated by poultices or fomentations, requires weeks, exhausts the patient by pain and suppuration.

The crucial incision is attended by loss of blood and high mortality. Since 1888 the writer has treated every case of carbuncle by completely burning out the infected mass with the thermo-cautery, through several skin openings. If the case is seen early there is no occasion to wait until the patient's strength is exhausted by pain. If a number of the openings exist, each one should be burned out. With the platinum point at a dull red heat, the entire mass is burned out under the skin. There is no loss of blood if the point is not too hot, complete relief from pain follows and there is no mortality. A hypo is given forty minutes (40) before the operation, when anesthetic is given and the head is partly shaved. Then remove the anesthetic to a safe distance and

quickly burn out as much as possible. If more anesthesia is required, remove the cautery to a safe distance until the patient is well asleep and repeat the cauterization until nothing remains of the infected mass. The results will please anyone who tries this method.

A case recently treated: The cautery bulb gave out before the operation was completed. The side burned out promptly healed, while the side treated by curetting suppurated and other openings occurred and it was two weeks longer in healing. There was pain for several days on that side but none over the burned areas after the operation. I advise against the use of bichloride of mercury or carbolic acid. A hot boric acid compress may be used for two (2) or three (3) days, and after that an antiseptic ointment such as nosophen one dram to vaseline one ounce is efficient and comfortable.

214 Lankershim Building.

FOR CHINESE TRADE.

One of the notable patents to be considered in the trade in patent medical preparations and in perfumery and toilet requisites is the advisability of labeling the goods in Chinese or at least of wrapping them in special wrappers describing them in Chinese characters. The bulk of the trade in all such goods retailed to consumers is done in goods so marked.

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EDITORIAL

WHY THIS SECRECY?

The following items recently appeared in the public press of Los Angeles:

"Schools Menace to Health, Says Leslie.

Thorough investigation of the sanitary conditions and features of the public schools will be made immediately as a result of the report made recently by Dr. George Leslie, head of the health and development department of the schools, and acted on at executive session of the Board of Education last night."

"Order Investigation of Schools' Health. 62,000 Children to Be Examined and \$10,000 Spent on Sanitation Remedies.

The health of 62,000 school children of this city, together with the sanitary conditions of the schools, will be investigated at the executive session of the Board of Education next Monday night. This was announced yesterday by President J. M. Guinn.

A health report of the schools, the first of its kind ever submitted to the

School Board, has been submitted by Dr. George L. Leslie, head of the department.

The report was not made public, but when the Board examined it, it immediately ordered an executive session.

"The whole staff of physicians will probably appear before us," said President Guinn.

Although the general health and sanitary conditions in the schools is considered excellent as far as is known, there are some places in particular reported unsanitary.

In order to carry on the investigation and bring the health conditions up to the highest possible standard, the Board of Education has authorized \$10,000, at most, to be spent for the purpose."

In view of the publicity which Messrs. Blight and Bean and Mrs. Craig (now members of the L. A. City School Board) gave to their statements about health examinations of school children (which statements were absolutely proven to be lies or virtually so), it is interesting to note why an executive or secret session must be held to con-

sider actual facts as collected by a health official of the schools.

Has our School Board reached that state where they only give publicity to false statements (when they are running for office) and suppress the real truth on public health measures?

If the school houses are unsanitary, the public have a right to know it.

The Practitioner calls upon the School Board to give publicity to this report of Professor Leslie's.

We deny the right of the Board to suppress matters of this kind, and particularly so, since some of its members went so far out of their way, in the past, as to give publicity to untruths about the physical inspection of our school children.

They were shouting for "personal liberty" then. We now demand they recognize the "city liberty" that would permit citizens to know what is in Professor Leslie's report, that demands a secret session.

WHO IS DISHONEST?

In the December 7th issue of the Los Angeles Herald, the Superintendent of the Los Angeles public schools, Mr. J. H. Francis, gave a very intemperate interview on a speech made the evening before by President Benjamin Ide Wheeler of the State University of California, before the Brown University Alumni Club. In his speech President Wheeler called attention to the fact that in our inauguration of new methods of education in many of our schools we seemed to be getting too far away perhaps from the settled and proven methods of the past.

Our Mr. Francis (from his vast experience as a school teacher and principal) promptly rushes into the press and gives an interview in which he says that President Wheeler did not possess sufficient knowledge on the subject which he discussed to know what

he was talking about, and that he was either childish or dishonest.

This is beautiful language for a city school superintendent to use in the public press toward one of the most prominent figures in educational life in America. Dr. Wheeler is head of one of the largest universities in America and of probably the largest undergraduate department of any university in our land, and the institution over which he presides owes much of its progress to his leadership, to his broad vision and foresight. He is much too well known not to have his statements on any educational subject at least receive courteous consideration.

An after-thought is the following:

In view of the way Mr. Francis reversed himself a few months ago to curry favor with some of those who appointed him(?) when he ordered out of the schools the tuberculosis educational literature the Los Angeles society had printed after receiving his permission (see July issue of the Southern California Practitioner) it might not be impertinent to really put the questions:

1. "Who really is dishonest—Mr. Francis or President Benjamin Ide Wheeler?"

2. "Who really is childish—Mr. Francis or President Benjamin Ide Wheeler?"

3. "Who really does not know what he is talking about—Mr. Francis or President Benjamin Ide Wheeler?"

A COMIC WRITER.

It seems that Harry Brook has at last found his proper sphere as a comic writer. His latest effusion is on "Manufacturing an Epidemic Scare," in Life, the issue of November 14th, 1912. Brook treats the subject in his characteristic light vein, quite devoid of common sense, which is well in accord with the attitude usually assumed by Life regarding matters of sanitation and sanity.

EARL TO THE RESCUE.

Under the ridiculous caption "Threatening to Mutilate the School 'Kids,'" the Earl of Los Angeles, in his Tribune of November ninth, tells us that "The official doctors of Los Angeles announce a new clinic for straightening out the crooked faces of school children." Horrible, horrible, horrible! Such clinics are common in the large cities. Our effete Earl has not been able to keep pace with the march of civilization and the remarkable growth of Los Angeles.

He describes this as a "craze to cut up our children." We understand that his own children need attention for adenoids that almost make their tongues protrude. It seems to be the old story. Those who neglect their own children are prolific in the gratuitous distribution of "crazy" advice about the treatment of other people's children. Of course, as a leader in matters of hygiene and preventive medicine, you know the reputation of our Earl. Horrible, horrible, horrible!

EDITORIAL NOTES

Drs. F. D. Vickers and Ralph T. Smith have recently opened offices in Deming, N. M.

It is rumored that Mrs. R. E. Hickman, of El Segundo, will erect a modern hospital on Maryland street.

Dr. A. C. Thorpe of Los Angeles has returned from two months' work in the hospitals of Chicago and Rochester.

Dr. Galloway was a man of high integrity, a thorough and painstaking physician, a beloved physician and an ideal friend.

The Chamber of Commerce of Safford, Arizona, has completed arrangements for the construction of a sanitarium to cost about \$60,000.

Dr. Elizabeth F. Kearney has returned after a six months' trip abroad, visiting the large hospitals upon the continent and England.

Dr. E. H. Thompson has taken out a permit for a sanitarium in Burbank to cost \$5,000. The cost when completed will be approximately \$15,000.

Dr. Albert H. Winter died November first at the Hospital of the Good Samaritan. The Doctor was a graduate of the Southern California Medical College.

Dr. C. G. Stivers of Los Angeles is home after spending a few weeks in New York and Philadelphia taking post-graduate work in ear, nose and throat and also in speech defects.

Young physician desires to help surgeon; will do office stenographic work, give anesthetics and assist at operations. Address "F. A. W.," care W. H. Ray, 1706 West 54th St., Los Angeles.

Dr. H. C. Peterson, of Stockton, was appointed health officer for the County, November twelfth, to succeed Dr. R. B. Knight. The appointment is made for a year and carries a salary of \$50 per month.

We note that Dr. E. C. Edmundson is president of the Montebello Chamber of Commerce, Dr. C. J. Hinman is chairman of the committee of health and sanitation, and Dr. W. F. Berry is chairman of the committee on finance and auditing.

Los Angeles is showing a remarkable natural gain in population. During October there were 682 births and only 456 deaths. Among the births there were 49 prospective presidents and 333 that may aspire to be the first lady of the land.

The Southern California Public Health Association held a well attended meeting at the Hotel Alexandria, Los Angeles, December 4, 1912. The new officers are: President, Charles David Strong, M.D., San Bernardino; Secretary, Charles Edward Ide, of Redlands.

Dr. E. Avery Newton of Bad Nauheim writes that after spending a month in Italy he will go to London and do some stomach and intestinal work, then to Vienna, where he will work with Prof. Van Noorden for about three months before returning to Bad Nauheim for the summer.

The San Francisco City Attorney has advised the Board of Health that the San Francisco Polyclinic and Post-Graduate College is entitled to the same privileges as other institutions engaged in giving medical instruction; that is, of having members of their staffs visit the City and County Hospital to the end that the instruction of students may be furthered.

We notice in a number of our clippings reports concerning Dr. Pottenger's eastern trip, of which the following is a sample: "Dr. Pottenger says that the most important discovery was announced by Dr. Bass of New Orleans, who has discovered the parasite which causes malaria, Dr. Bass giving a practical demonstration and exhibit of his new germ, scientifically called *plasmodium malaria*." (!)

On Wednesday evening, November 27, 1912, there was organized at the College of Physicians and Surgeons a Medical Society to be known as the Charles W. Bryson Medical Society. This society was formed with the idea of promoting a feeling of fellowship between the students, faculty and alumni of this college and to afford an opportunity for presenting scientific programs by both students and graduates.

Dr. P. G. Cotter, of 729 South Burlington Avenue, Los Angeles, was driving

north in his car, on Normandie street, when his car was rammed in the rear by a West Sixth street car. The doctor's car was turned over and the door of the machine caught Dr. Cotter across the chest, crushing four ribs on the right side and driving them into his lungs. He was taken to his home by Dr. W. W. Richardson, who reported the wounds dangerous.

Mrs. Percy V. Pennybacker of Austin, Texas, president of the General Federation of Women's Clubs, has inaugurated a nation-wide campaign along rational up-to-date lines. The Women's Clubs, not only in Texas, but all over the United States, are urged to co-operate with the school authorities in working for medical inspection of schools, supplemented by school nurses, compulsory vaccination, the adoption of dental inspection and the teaching of social and personal hygiene.

Bradford S. Galloway, M.D., University of Michigan, Ann Harbor 1880, a prominent practitioner, died suddenly on November 2nd, 1912, at Los Angeles, California, from embolism.

After Dr. Galloway's graduation he located at Leadville, Colorado, where he practiced for twenty-three years. He was chief surgeon for the Colorado Midland Railway for three years. Local surgeon for the Colorado Southern for twenty years. After leaving Leadville he practiced in Denver, Colorado, for two years. Leaving there he located in Goldfield, Nevada, where he practiced for five years. He had been a resident and practitioner of Los Angeles, California, for the past four years.

The Lane Medical Library, San Francisco, was formally opened and dedicated November third, and at the same time Stanford University formally accepted the Cooper Medical College and the Law Hospital. The Lane Medical Library is the largest medical library

west of Chicago. One-third of the estate of Dr. Levi Cooper Lane who died in 1902, was set aside for the erection of the building, which cost \$125,000. The building is a fireproof steel concrete structure of five stories and basement, with a capacity of 120,000 volumes. It contains at present 40,000 volumes.

The Los Angeles Society of Social Hygiene announces that its purpose is "to aid in establishing the single standard of morals; to assist parents and teachers in the proper instruction of the young in sex knowledge, and to enlighten the public regarding the seriousness of diseases resulting from immoral conduct." Some of this sounds like dangerous ground, especially since this Society is of the so-called popular variety, rather than scientific. The officers are: President, Judge Geo. H. Hutton; Vice-Pres., Mrs. Alice Stebbins Wells; Force Parker; Dr. Thos. Newlin; Treasurer, Dr. Norman Bridge; Secretary, Clifford Howard; Financial Secretary, Mrs. Berthold Baruch; Recording Secretary, Mrs. Nanno Woods.

The Southern California Medical Society met in its forty-seventh regular semi-annual session at the Hotel Alexandria, Los Angeles, December 4-5, 1912. After the business session, Wednesday afternoon was devoted to the consideration of Poliomyelitis, the various phases of which received considerable discussion. A number of interesting patients and specimens were presented Wednesday evening, after which the Society proceeded to enjoy a smoker, that was made memorable especially by the address of Mr. Fishburn, which is presented to our readers in this issue of the Practitioner. Mr. Fishburn is a minister at the present time, in charge of one of the prominent churches in Los Angeles, having wandered from the field of medicine to a degree. He is a graduate in medicine, but apparently prefers preaching to practicing. At any rate, he is doing a good work.

The meeting was characterized by a large attendance at all the sessions. The May meeting will be held in San Bernardino.

BOOK REVIEWS

OUT OF DOORS CALIFORNIA AND OREGON. By J. A. Graves. Profusely illustrated. Los Angeles: Grafton Publishing Co., 1912.

This is a delightful little volume, attractively bound, beautifully illustrated and charmingly written, well adapted to the requirements of literature suitable for the physician's waiting room. It is written in such a vein that you will be sure to read it, if you have the opportunity. It is much like autoing California and Oregon, without the fatigue of such touring.

Here we find Lo the poor Indian converted into Lo the Philosopher. "After sitting down a couple of times in water two feet deep, I concluded to stay on shore and cast out into the pool. Fol-

lowing this exhilarating exercise with indifferent success, I noticed approaching a little, old Indian. He was bareheaded and barefooted. His shirt was open, exposing his throat and breast. His eyes were deep set, his hair and beard a grizzly gray. He had a willow fishing pole in one hand and a short bush with green leaves on it, with which he was whacking grasshoppers, in the other. He circled around on the bank near me, now and again catching a hopper. I noticed that he ate about two out of every five that he caught. The others he kept for bait.

Finally he approached the stream. He paid no attention whatever to me. He selected a spot almost under me,

squatted down upon a flat rock, put two grasshoppers on his hook, threw it into the stream, and in a very short time drew out a good six-pound trout. Filled with admiration for the feat, while he was tying a string through the fish's gills I said to him, "Muy mahe," which another Indian had told me meant "big trout." Without looking up or turning his head, he said to me in perfect English, "What sort of lingo are you giving me, young man? The true pronunciation of those words is," and then he repeated "Muy mahe," with just a little twist to his words that I had not given them. Resuming the conversation he remarked, "Why not speak English? When both parties understand it, it is much more comfortable. I intended to catch but one fish, but as you have admired this one, allow me to present it to you with my compliments." He had turned around now, and held out the struggling trout, a pleasant smile upon his worn features.

Embarrassed beyond measure, I apologized for attempting to talk to him in his own language, and accepted the trout. He baited his hook, cast it into the stream, and in a short time landed a still larger trout. Without removing it from the hook, he came up the bank to where I was seated. He laid his fish and rod on the grass, wiped his forehead with his hand and sat down.

"I never catch more fish, or kill more game than I need for my present wants," he remarked. "That trout will be ample for my wife and myself for supper and breakfast, and in fact for all day tomorrow. When he is gone I will catch another one."

Then, turning to me, he asked, "From what section of civilization do you hail?" I told him I was from Los Angeles.

"Ah, Los Angeles," he murmured. "The Queen City of the West and Angel City of the South. I have read much of your beautiful city, and I have often thought I would like to visit it

and confirm with my own eyes all I read about it. What a paradise that country must have been for the Indian before you white men came! I can hardly imagine a land of perpetual sunshine, a land where the flowers bloom constantly, where snows never fall. Yes, I would like to go there, but I imagine I never shall." Then, with an inquiring glance, "What may be your calling?" he asked.

I told him I was an attorney-at-law.

"A noble profession," he remarked. "Next to medicine I regard it as the noblest profession known to our limited capabilities. Do you ever think," he asked me, "that the medical profession is devoted to relieving physical ills? To warding off death? The law, on the other hand, takes care of your property rights. It is supposed to be the guardian of the weak. How often, however, do we see its mission perverted, and how often it becomes an oppressor of the unfortunate. How many times do we see it aiding in the accumulation of those large fortunes with which our modern civilization is fast becoming burdened and brutalized."

Dr. Witherbee remarked to the reviewer not long since that asking a man how he likes your car is much like asking him how he likes your wife, for it is well known that every man has a peculiar regard for his own wife and automobile, that his friends are prone to respect. Well, Graves has a Franklin car. And if the advertising department of that company don't make use of his endearing descriptions, which are akin to the lover's unbiased opinion of his first sweetheart, they are slower than we believe. We all like an enthusiast.

It is difficult to resist the appeal of the opening paragraph: "Come, you men and women automobilists, get off the paved streets of Los Angeles and betake yourselves to the back country of San Diego county, where you can enjoy automobile life to the utmost during

the summer. There drink in the pure air of the mountains, perfumed with the breath of pines and cedars, the wild lilacs, the sweet-pea vines, and a thousand aromatic shrubs and plants that render every hillside ever green from base to summit. Lay aside the follies of social conditions, and get back to nature, pure and unadorned, except with nature's charms and graces.

A TEXT-BOOK OF OBSTETRICS: INCLUDING RELATED GYNECOLOGIC OPERATIONS. By Barton Cooke Hirst, M.D., Professor of Obstetrics in the University of Pennsylvania. Seventh Revised Edition. Octavo of 1013 pages, with 895 illustrations, 53 of them in color. Philadelphia and London: W. B. Saunders Co., 1912. Cloth, \$5.00 net; Half Morocco, \$6.50 net.

This work which has always been a popular one both to students and practitioners was issued as a first edition in 1898.

With each successive revision old illustrations have been taken out and new ones put in to replace them. The book has been in almost universal use since the first edition of it appeared. The author has enlarged upon it from time to time, largely from his own practical experience among an unusually large private clientele and hospital work.

The book is divided into six parts. Part one taking up the Physiology, Diagnosis and Management of Pregnancy. Part two taking up the Physiology and Management of Labor and of the Puerperium. Part three, The Mechanism of Labor. Part four deals with the Pathology of Pregnancy, Labor and the Puerperium. Part five with Obstetrical Operations. Part six the New-born Infant.

On page 810, under the head of "Induction of Premature Labor" occurs the following, which gives the reader an idea of the clearness, conciseness and wisdom of the text.

"Methods of inducing Labor. Krause's method is the easiest for the general practitioner without special training in gynecological maneuvers.

An aseptic, stiff, silk or linen bougie (No. 17 French), which has been soaked for at least one-half hour in a cold corrosive sublimate solution (1:1000), is anointed with sterile glycerin. The patient is placed in the dorsal position. The operator passes two fingers of his left hand into the vagina, inserting one or, if possible, both finger tips into the cervical canal, which dilate the cervix and are swept around the lower uterine segment to sever the attachment of the membranes. The bougie is then passed along the groove between the two fingers until it enters the cervical canal and passes into the lower uterine segment. It is pushed further in until it has entirely disappeared within the uterus, with the exception of an inch or a little more that protrudes from the external os. An iodoform gauze tampon is packed lightly in the vagina to keep the bougie in place. Active and effective labor pains may begin in from thirty minutes to thirty-six hours. In the majority of cases labor begins within twelve hours. If it has not begun at the end of that time, a second bougie should be inserted alongside the first. If, after twenty-four hours more, labor has not yet begun, the cervix should be artificially dilated with bags or Bossi's dilators, and, if necessary, the membranes should be ruptured, forceps may be applied to the head, or version may be performed, and the child extracted by the feet.

Instead of a bougie, a rectal tube of soft rubber, boiled, may be inserted into the lower uterine segment where it lies in coils.

In about one-fifth of the cases the bougie method fails to excite labor pains. The following plan is the most certain and efficient: Dilation of the cervical canal to a linear diameter of about 7 c.m. with the modified Gau dilator; the insertion of two bougies and also of the author's bag (medium or large size.) Two hours later a hypo-

dermic injection of pituitrin, 1 c. c., 20 per cent. solution, is given.

If the mother's condition demands immediate delivery, the following methods are available (accouchment force): The cervical canal is dilated forcibly by the hand or by Bossi's dilator, the membranes are ruptured, a forceps is applied, or version is performed and the child is extracted by the feet; vaginal Caesarean section; the use of Pomeroy's bag for ten to fifteen minutes and then the forcible extraction of the child by forceps or version."

The book thoroughly covers the subject in so far as a one-volume work can do and contains very little to criticize. The work is to be thoroughly commended and to be recommended to both students and practitioners as one of the reliable works of the present day.

FURTHER RESEARCHES INTO INDUCED CELL-REPRODUCTION AND CANCER. Volume II, consisting of papers by H. C. Ross, M.R.C.S., Eng., L.R.C.P., London; J. W. Cropper, M.B., M.Sc., Liverpool, M.R.C.S., Eng., L.R.C.P., London; and E. H. Ross, M.R.C.S., Eng., L.R.C.P., London. 125 pages with illustrations. The John Howard McFadden Researches. London: John Murray, Albemarle Street, W. April, 1912. \$1.00 net.

This volume is concerned with the elucidation of the theory that cell-proliferation and possibly cell-development are directly brought about by chemical agents set free by cell-death. The first volume published on this subject was issued December 15, 1910, under the caption Induced Cell-reproduction and Cancer, and in September, 1911, there appeared further researches into induced cell-reproduction and cancer, of which this volume is a continuation. In the present volume, experiments are described that would seem to show the possibility of producing cell-proliferation and swellings resembling tumors in the living by the action of the chemical substances that previous experiments showed may induce individual cell-multiplication.

WOOD'S PHARMACOLOGY AND THERAPEUTICS. For students and practitioners of medicine. By Horatio C. Wood, Jr., M.D., Professor of Pharmacology and Therapeutics in the Medico-Chirurgical College; Physician to the Medico-Chirurgical Hospital; Second Vice-Chairman of the Committee of Revision of the U. S. Pharmacopoeia. Price \$4.00. Philadelphia and London: J. B. Lippincott Co.

Pharmacology has undergone a remarkable revolution during the past two decades, both in the development of knowledge and in the methods of teaching. We know much more of the changes produced by drugs, and are beginning to understand something as to how they act. The author notes the tendency nowadays to condemn the so-called practical branches of the medical course and to unduly exalt the scientific branches, just as a few years ago there was a very evident tendency in the opposite direction.

The following, regarding Salvarsan, is interesting: "The discovery of the value of this agent was the result of a long systematic research by Professor Ehrlich, based upon a previously conceived theory. The idea which led to this research was that the pathogenic micro-organisms of the animal kingdom do not give rise in the human body to antagonistic poisons (antitoxins); that the diseases caused by them are, therefore, not self-limited, and that the only hope of curing these diseases is to find some chemical agent which should be more poisonous to the parasite than to the host."

Were you taught this? "At present the only agents which are known to affect the quantity of bile secreted are the bile-salts and the salts of salicylic acid, although there is some evidence that sodium benzoate and colehiene have some influence in this direction." Schaeffer contends that the amount of bile solids passed after the exhibition of oxgall did not exceed the normal plus the amount which had been artificially administered.

It is one of the books that is worth while.

FLINT'S PHYSICAL DIAGNOSIS. Sixth edition, revised and enlarged by Haven Emerson, A.M., M.D., Associate in Physiology and Associate in Medicine, College of Physicians and Surgeons of Columbia University; Assistant Visiting Physician, Bellevue Hospital. 361 pages. Lea & Febiger, Philadelphia and New York, 1912.

This small work is one of the most reliable textbooks on physical diagnosis and we are glad to note that it has been revised and brought down to date. It is simple, direct, exact and reliable. The chief additions are two chapters dealing with examination of the abdominal viscera and of the nervous system.

HASHEESH. An essay by Victor Robinson, Contributing Editor to the Medical Review of Reviews, Pharmaceutical Chemist to Columbia University, Member of the American Chemical Society, Author of *Pathfinders in Medicine*. Published by the Medical Review of Reviews, 206 Broadway, New York, 1912. Price 50 cents, postpaid.

This is an interesting narration of observations and experiments with Hashesh (Cannabis indica), the winning rival of opium as a producer of visions of paradise. The essay is written in a most entertaining style, so that without conscious effort you study the drug from the historical, chemical, botanical, physiological, psychological, therapeutic and pharmacological viewpoints. The writer describes voluntary experiments upon himself and some of his friends. We hope his delightful description will not unduly popularize the use of this drug.

SEXUAL IMPOTENCE. By Victor G. Veeki, M.D., Consulting Genito-Urinary Surgeon to the Mount Zion Hospital, San Francisco. Fourth edition, enlarged. 12mo of 394 pages. Philadelphia and London: W. B. Saunders Co., 1912. Cloth, \$2.25 net.

Veeki's *Sexual Impotence* is so well known that it is difficult to review, save to state that the present edition is fully up to the preceding ones in every respect. The author has emphasized the recent advances of urology. Most of the modifications and additions are in

the chapters on the treatment of sexual impotence, there being no changes of note in those dealing with the sociological and ethical sides of the subject. Yohimbin is described as "a preparation for which powerful aphrodisiac properties were and still are claimed from otherwise trustworthy and authoritative sides." Veeki believes it has no power as an aphrodisiac. "While I am fairly sure that there is no real aphrodisiac in existence, I have not given up the search for it. At present I am experimenting with the fluid extract of the cortex of *muira pauma*, the Brazilian *Acanthaceae*, and with the fluid extract of *Catuba*, another Brazilian 'aphrodisiac' produced from *Juniperus brasiliensis*."

PRACTICAL ANATOMY. An exposition of the facts of gross anatomy from the topographical standpoint and a guide to the dissection of the human body. By John C. Heisler, M.D., Professor of Anatomy in the Medico-Chirurgical College of Philadelphia. With 366 illustrations, of which 225 are in color, by E. F. Faber. Price \$4.50. Philadelphia and London: J. B. Lippincott Co.

This is a convenient volume, bound in flexible leather. The subject is considered in the four parts, into which the body is commonly divided in dissection. In the text, and especially in the illustrations, Piersol's anatomy has been freely drawn upon. However, 171 of the illustrations were made especially for this work. It is an excellent volume to use at the dissecting table. The following accompanied by appropriate illustrations, serves to show the character of the work: "The duodenal-jejunal junction is interesting as being the site of various forms of peritoneal pockets or fossae which are important clinically. The inferior duodenal-jejunal fossa is the most constant of these and is situated opposite the beginning of the fourth part of the duodenum behind a non-vascular fold of the peritoneum. The orifice of the fossa looks upward. The superior fossa,

second in order of frequency, is situated near the level of the termination of the fourth part of the duodenum behind a fold of peritoneum which is usually vascular, containing either a tributary of the left colic or of the middle colic vein; its orifice looks forward. The mesocolic fossa, situated over the terminal part of the fourth segment of the duodenum behind a fold of peritoneum connected with the transverse mesocolon, is of less common occurrence than the other two. The paraduodenal fossa is a little pocket sometimes found to the left of the fourth part of the duodenum and opening to the left. The retroduodenal fossa is situated behind the third and fourth parts of the duodenum. It must not be understood that any one subject presents all of these fossae. The clinical interest attached to these peritoneal pockets hinges upon the fact that a small portion of intestine may become lodged in one of them, constituting a form of retro-peritoneal or internal hernia."

THE SURGICAL CLINICS OF JOHN B. MURPHY, M.D., at Mercy Hospital, Chicago. Volume I, Number 3. Octavo of 174 pages, illustrated. Philadelphia and London: W. B. Saunders Co., 1912. Published bi-monthly. Price per year: Paper, \$3.00; cloth, \$12.00.

Among other articles, this issue contains an Exhibition at Clinic of Cases previously operated upon, with comments, photographs and skiagrams. Here are given a number of cases of bone transplantation. These were referred to in a discussion before the Los Angeles County Medical Association in some articles published in the last issue of the Southern California Practitioner.

In another article are given the five diagnostic methods so often referred to by Murphy: fist percussion of the kidney; hammer stroke percussion of the gall-bladder; deep-grip palpation of the gall-bladder; piano percussion to determine the presence of fluid or exudate in the abdominal cavity; and the sim-

ultaneous palpation of both iliac fossae in cases of suspected acute appendiceal involvement.

The Surgical Clinics are inimitably Murphy-ic.

BLAIR'S SURGERY AND DISEASES OF THE MOUTH AND JAWS. A practical treatise on the surgery and diseases of the mouth and allied structures. By Vilray Papin Blair, A.M., M.D., Professor of Oral Surgery in the Washington University Dental School, and Associate in Surgery in the Washington University Medical School. 638 pages with 384 illustrations. St. Louis: C. V. Mosby Co., 1912. Price \$5.00.

Upon reviewing this excellent monograph, one is impressed by the thorough manner in which the author handles his subject, the beauty and clearness of the numerous illustrations, and the great detail of description. It is of interest to physicians and dentists, and quite indispensable to those doing surgical work in the region of the mouth and jaws. Both the text and the numerous original illustrations are evidence of the enormous amount of work done by the author in the preparation of this monograph.

INFANT FEEDING. By Clifford G. Grulee, A.M., M.D., Assistant Professor of Pediatrics at Rush Medical College, Attending Pediatrician to Cook County Hospital. Octavo of 295 pages, illustrated. Philadelphia and London: W. B. Saunders Co., 1912. Cloth, \$3.00 net.

This monograph is based on a course of lectures given to the students of Rush Medical College for the past three years. The author has endeavored to bring the subject down to date, and, as he states, "to put forth the practical application of these principles in such a way that they can be grasped by one no more familiar with the subject than the practising physician." We note that the writer "wishes to express his obligation to his wife for much friendly criticism." Wonder what it was. There are probably few subjects concerning which there is greater diversity of opinion among the

laity (and physicians?) than the one here discussed, "Infant Feeding." "Babies' alimentary canals vary as much as their dispositions and mental development, and most mothers are intelligent enough to understand this if the fact is only brought to their attention." There is much to commend in the work. Plate II is labeled "Stool of normal infant fed on breast milk." Wouldn't recognize it without the label. The same criticism applies to Plate III, "Normal stool of child fed on milk," and to all the plates, which are supposed to represent the various kinds of infant's stools. But then, how would you represent them artistically?

INTERNATIONAL CLINICS. A quarterly of illustrated clinical lectures and especially prepared original articles on treatment, medicine, surgery, neurology, pediatrics, obstetrics, gynecology, orthopedics, pathology, dermatology, ophthalmology, otology, rhinology, laryngology, hygiene, and other topics of interest to students and practitioners by leading members of the medical profession throughout the world. Edited by Henry W. Cattell, A.M., M.D., Philadelphia, with the collaboration of John A. Witherspoon, M.D., Nashville; William Osler, M.D., Oxford; A. McPhedran, Toronto; Frank Billings, Chicago; Charles H. Mayo, Rochester; Thomas H. Rotch, Boston; John G. Clark, M.D., Philadelphia; James J. Walsh, M.D., New York; J. W. Ballantyne, M.D., Edinburgh; John Harold, London; and Richard Kretz, M.D., Vienna. With regular correspondents in Montreal, London, Paris, Berlin, Vienna, Leipsic, Brussels and Carlsbad. Volume III, twenty-second series, 1912. Philadelphia and London. J. B. Lippincott Co. Price \$2.00.

Every volume of the International Clinics contains a fund of interesting reading for the medical man. Probably the article that will be most universally enjoyed in this volume is one entitled "How it happens that the offspring of plants, animals, and men is sometimes male, sometimes female," by Professor Theophilus Ciesielski, describing his theory of sex determination. The translation presented was obtained through the courtesy of S. W. Caruthers, M.D., (Edin) of Norwood, England. The theory is based largely upon breeding experiments in plants, later confirmed by

similar experiments in animals, and in man. The factor put forth by Ciesielski is the age of the male gamete, holding that the older semen produces females. Those who hold to the catabolism and anabolism theory may claim that the union of a stale sperm with a fresh ovum would leave a marked excess of anabolic tendency and produce a female. In the theory of Professor Edmund B. Wilson, which bases the determination of sex upon the distribution of the chromosomes in the sperm cell, X-spermatozoa produce females, and Y-spermatozoa males, it may be that the Y-spermatozoa are the shorter lived, which would explain why females result from stale sperm, though not why only males result from fresh sperm. According to Ciesielski, semen that is less than twenty-four hours old produces only males. Simple, isn't it? But how is it to be determined that all the semen of any ejaculation is all stale or all fresh, whether some older semen has not remained behind from a former ejaculation, or whether, on the other hand, fresh semen may not be added to the so-called stale semen? At any rate, it is an interesting theory.

STEDMAN'S MEDICAL DICTIONARY.

A practical medical dictionary of words used in medicine with their derivation and pronunciation, including dental, veterinary, chemical, botanical, electrical, life insurance and other special terms; anatomical tables of the titles in general use and those sanctioned by the Basle Anatomical Convention; pharmaceutical preparations, official in the U. S. and British Pharmacopoeias and contained in the National Formulary; chemical and therapeutic information as to mineral springs of America and Europe, and comprehensive lists of synonyms. By Thomas Lathrop Stedman, A.M., M.D., Editor of "Twentieth Century Practice of Medicine;" Editor of the "Medical Record." Second revised edition. Illustrated. New York: William Wood & Co., 1912. Price \$4.50 net plain, \$5.00 indexed.

We are glad to see the second edition of this excellent dictionary make its appearance a little over a year after the first edition. Over two thousand new titles and sub-titles have been

added, and in every way the work appears to have been brought strictly down to date. So far we have not discovered any errors in it.

CYCLOPEDIA OF AMERICAN MEDICAL BIOGRAPHY. By Howard A. Kelly, M.D., Professor of Gynecologic Surgery at Johns Hopkins University, Baltimore. Two octavo volumes averaging 525 pages each, with portraits. Philadelphia and London: W. B. Saunders Co., 1912. Per set: Cloth, \$10.00 net; Half Morocco, \$13.00 net.

Those acquainted with the author of these volumes cannot be surprised at the monumental character of this work. It contains a description of the lives of eminent deceased physicians and surgeons of this country from 1610 to 1910. It is the best compilation of the sort, and one that no physician would willingly omit from his library.

EYE, EAR, NOSE AND THROAT. Volume III of The Practical Medicine Series, comprising ten volumes on the year's progress in Medicine and Surgery. Under the general editorial charge of Gustavus P. Head, M.D., Professor of Laryngology and Rhinology, Chicago Post-Graduate Medical School, and Charles L. Mix, A.M., M.D., Professor of Physical Diagnosis in the Northwestern University Medical School. This volume is edited by Casey A. Wood, C.M., M.D., D.C.L.; Albert H. Andrews, M.D., and Gustavus P. Head, M.D. Series 1912. Chicago: The Year Book Publishers, 180 N. Dearborn Street. Price of this volume \$1.25. Price of the series of ten volumes, \$10.00.

The series is published primarily for the general practitioner, but the arrangement in several volumes enables those interested in special subjects to buy only the parts they desire.

DAYTON'S PRACTICE OF MEDICINE. A manual for students and practitioners, by Hughes Dayton, M.D., Associate Attending Physician, New York Hospital; Formerly Instructor in Physical Diagnosis, Cornell University Medical School, New York. Second edition, revised and enlarged. Lea & Febiger, New York and Philadelphia. 12 mo, 326 pages. Cloth, \$1.00 net.

This is the volume on practice in the Medical Epitome Series. The "little red book" gained quite a reputation in its first edition, which this second edition seems destined to fully sustain.

GYNECOLOGY. The Practical Medicine Series, comprising ten volumes on the year's progress in medicine and surgery. Under the general editorial supervision of Gustavus P. Head, M.D., Professor of Laryngology and Rhinology, Chicago Post-Graduate Medical School; and Charles L. Mix, A.M., M.D., Professor of Physical Diagnosis in the Northwestern University Medical School. Volume IV, Gynecology, edited by Emilius C. Dudley, A.M., M.D., Professor of Gynecology, Northwestern University Medical School; Gynecologist to St. Luke's and Wesley Hospitals, Chicago; and C. von Bachelie, M.S., M.D., Assistant Professor of Obstetrics, Chicago Polyclinic and College of Physicians and Surgeons; Gynecologist to the German Hospital, Chicago. Series 1912. Chicago: The Year Book Publishers, 180 N. Dearborn Street. Price of this volume \$1.25; price of the series \$10.00.

This volume maintains the high standard of the set, giving a brief resume of the work on the subject of which it treats. However, it contains only fourteen references to the literature of 1912, most of the articles reviewed being of the 1911 vintage.

BACTERIA AND PROTOZOA, FOX. Elementary bacteriology and protozoology, the microbiological causes of the infectious diseases, by Herbert Fox, M.D., Director of the William Pepper Laboratory of Clinical Medicine in the University of Pennsylvania; Pathologist to the Zoological Society of Philadelphia, etc. 12 mo, 237 pages, with 67 engravings and 5 colored plates. Cloth, \$1.75 net. Lea & Febiger, Philadelphia and New York, 1912.

This work is designed for nurses and beginners, and deals especially with the transmission of the various infections. It is a good practical small textbook, comparatively free from technicalities.

YEARBOOK OF THE DEPARTMENT OF AGRICULTURE.

This is a volume of 730 pages, containing the report of the secretary, 31 articles contributed by the various branches of the department, a statistical Appendix of 194 pages, and an Index of 32 pages. The articles are illustrated by 20 text figures and 67 full-page illustrations, of which 9 are colored. The articles included in the Yearbook have not been published elsewhere.

WHAT TO DO IN CASES OF POISONING. By William Murrell, M.D., F.R.C.P., Senior Physician to the Westminster Hospital; Lecturer on Clinical Medicine and Joint Lecturer on the Principles and Practice of Medicine; Late Examiner in the Universities of Edinburgh, Glasgow and Aberdeen, and to the Royal College of Physicians of London. Eleventh edition. Paul B. Hoeber, 69 East 59th Street, New York, 1912. \$1.00 net.

A convenient little volume, suitable for the pocket or case.

PHYSICIAN'S VISITING LIST FOR 1913. Sixty-second year of its publication. Philadelphia: P. Blakiston's Son & Co. Price \$1.25 net.

This well known visiting list is published in the pocketbook style in a regular edition for 25 or 50 patients, and in two-volume sets for 50, 75 and 100 patients; in a perpetual edition for 1300 or 2600 names; and in a monthly edition.

THE PRACTITIONER'S VISITING LIST FOR 1913. An invaluable pocket-sized book containing memoranda and data important for every physician, and ruled blanks for recording every detail of practice. The Weekly, Monthly and 30-Patient Perpetual contain 32 pages of data and 160 pages of classified blanks. The 60-Patient Perpetual consists of 256 pages of blanks alone. Each in one wallet-shaped book, bound in flexible leather, with flap and pocket, pencil with rubber, and calendar for two years. Price by mail, postpaid, to any address, \$1.25. Thumb-letter index, 25 cents

extra. Descriptive circular showing the several styles sent on request. Lea & Febiger, Publishers, Philadelphia and New York.

This is the twenty-ninth year of issue of the Practitioner's Visiting List. The text has been thoroughly revised and brought up to date.

THE MEDICAL RECORD VISITING LIST FOR 1913 is out.

This well known list is furnished for 30 or 60 patients per week, with or without dates, and for 90 patients per week with dates only. The binding is red or black morocco, or in calf or seal at an extra price. As novelties they may be obtained in the form of two books of six months each, so arranged that they fit into seal or calf-skin wallets. It is a standard visiting list.

STATE BOARD EXAMINATION QUESTIONS AND ANSWERS OF THE UNITED STATES AND CANADA. A practical work, giving authentic questions and authoritative answers in full that will prove helpful in passing state board examinations. Reprinted from the Medical Record. Fourth edition, thoroughly revised. Every question answered in full. New York: William Wood & Co., 1912. Price \$3.00 net.

This is a very popular work, of convenient size. It gives one set of questions and answers from each state.

MISCELLANEOUS

A LETTER.

At the New York Post Graduate School, I saw a most interesting series of cases of Potts' disease treated by fresh bone splints from the tibia. Several cases were shown—some two weeks, some three to four months after operation. The results were good. There was entire absence of pain and only slight tenderness over the side of former deformity which had been relieved by the operation, the steps of which were as follows: First an incision is made over the spinous pro-

cesses of the vertebrae, extending one vertebra on either side of the deformity. The spinous processes reached they are split with a chisel, and bent over, fractured to one side. A piece of the patient's tibia long enough to extend from one vertebra on either side of the deformity to one on the opposite side, is placed in between the cut surfaces and sutured firmly in place with absorbable sutures. The skin and muscles are sutured back in place and the wound dressed. The patient is kept on the back, a varying length of

time. One patient, a chauffeur who had had severe pain, preventing him from leaving his bed for months, was shown, in whose case the operation, done six weeks previously had been followed by immediate relief from pain. The relief from pain in all cases was the most striking feature, and there was absolute immobility of the spine at the site of former disease.

At Dr. G. Hudson Makuen's Clinic in Philadelphia—where he has given personal instruction for the past 27 years—I attended for a month his classes on the training of patients who had speech defects. To this clinic many children are brought for diagnosis, to determine whether they were unable to speak correctly because of lack of brain development, or whether they had some form of functional speech disorder. The former would have placed them in some public institution along with hundreds of others with but little chance for improvement, whereas if the latter, systematic instruction in the principles of speech, would be sure to be followed by a marked benefit.

C. G. STIVER.

Dr. George M. Kober, dean and professor of hygiene, medical department, Georgetown University, Washington, D. C., says:

Dr. Bailey K. Ashford, of the United States Army, was the first to demonstrate the existence of hookworm in Porto Rico. He made a practical demonstration as to what could be done in the way of stamping out the disease. Porto Rico defrayed the expenses. Yet in our own afflicted States, the stamping out of the disease is practically left to private philanthropy. Porto Rico is an example of what might be done if we had an efficient Federal Health Department that would look into such problems and ~~take~~ take them up with the respective States. It is clearly the duty of every State to protect the lives and

health of its people. It ought not to be left to private philanthropy to undertake work in health protection any more than in fire or police protection.

One shouts valiantly for every new product of the advertiser's skill; another asserts boldly that the treatment of disease is a figment of the imagination. One praises baths as the modern elixir of life, another electricity, another radium. This one rescues his without the use of the knife; Dr. That is sure of eradicating your consumption by his marvelous new discovery, or Dr. Otherwise of rehabilitating your kidneys, which the regular profession has given up as a hopeless job.

The more deadly the disease, the more blatantly certain is the quack that he alone can save you, and in extreme cases, where he has failed to get there earlier, he may even raise you from **your coffin** and restore you to your astonished and admiring friends. Such things have happened—in the advertising columns of the newspapers—and pitiful groppers after relief from suffering believe that they may happen again, otherwise charlatanry would cease to spread its daily cure.

MODIFIED MILK IN INFANT FEEDING.

The October issue of *Pediatrics* contains a paper giving a practical resume of existing knowledge upon the modification of cow's milk as a substitute infant food. The author has made a comprehensive study of the subject from all points of view, and dwells especially upon the value of cereal decoctions in the modification of cow's milk. In this issue there is given a short abstract from the paper, showing its scope and character. The practical nature of the paper will appeal to the general practitioner, and copies can doubtless be had of the author.

SANITARY MEASURES IN RICE CULTURE.

[From Consul Frank Deedmeyer, Leghorn, Italy.]

Rice cultivation in the province of Lucca, Italy, is subject to certain rules, promulgated by royal decree and supplemented by provincial regulations, which have for their object, primarily, the safeguarding of the health of the public and of those engaged in this industry.

No rice plantation can be established nearer than 1.24 miles to any city or town of more than 10,000 inhabitants, within 984 feet of one having less than 10,000 inhabitants, 656 feet of any burial ground, or 164 feet of any isolated dwelling. The waters used to flood rice fields must not be derived from basins, pools, or ponds; must not contain impurities; and must be kept moving constantly. Weeds and roots are to be carried off the fields daily or covered with earth to a depth of not less than 2 feet.

No person is allowed to lay out a new rice plantation without first giving notice to the mayor of the nearest community, furnishing a written description of the territory, its area, and a topographical map thereof. The public authorities, after a report from the provincial health officer, pass on each application. As a rule permission is granted only if the proposed site is unfit for dry cultivation.

Rest Periods—Official Inspection.

Persons working in the rice fields must be allowed one hour of rest after each of the two principal meals of the day, and no person can work longer at any time than three and one-half hours, while harvesters must have three hours of rest in two working days. Those engaged in thrashing must be given one hour of rest in every six hours of work. Posted notices about the field must state these legal rest periods.

Each community to which laborers from the outside resort in the harvest-

ing and shelling of rice is furnished medical aid and drugs at public expense. The quarters, especially the sleeping rooms, are inspected regularly by the health officer, who also prescribes the character and the minimum quantity of food to be supplied. This cost is assessed upon the cultivators of rice in the respective communities. The law, through a system of deposits to be made in the local savings banks by the owners or managers of these plantations, secures the wages of the laborers.

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ADVERTISEMENT.

For the benefit of physicians in this city feeling the need of a speaking knowledge of Spanish, there is being started a Conversational Spanish class by Miss Martina Case of Chihuahua, Mexico. The term of lessons will cover 15 weeks, to meet two evenings a week in a central location. Those desiring further information may address Miss Martina Case, 211 E. Lime Ave., Monrovia.

Reductions have been made in infant mortality rates by improved milk and water supplies and by educational campaigns among mothers, but the present rate is so high, from lack of further effort to reduce it, that a New York politician recently remarked, "Those babies' funerals get on my nerves." In Shakespeare's play, Macbeth, one of

the most effective scenes is where the witches conjure up the ghosts of those who were slain by Macbeth in order to excite in his mind remorse and a sense of responsibility for their death. If some witch or wizard could conjure up the unnecessary babies' funerals annually occurring in the country, it would be found that the little hearses would reach from New York nearly to Chicago. If we should add the mourning mothers and friends, it would make a cortege extending across the continent.

Mr. Adams states:

Legislation is the most obvious remedy, pending the enlightenment of the general public or the awakening of the journalistic conscience. But legislation proceeds slowly and always against opposition, which may be measured in practical terms as \$250,000,000 at stake on the other side. I note in the last report of the proprietary association's annual meeting the significant statement that "the heaviest expenses were incurred in legislative work."

CALIFORNIA STATE BOARD EXAMINATIONS, LOS ANGELES, DECEMBER, 1912.

HYGIENE

(Answer Ten Questions Only)

1. What diseases are transmitted by (1) the fly, (2) the flea, (3) bed-bug, (4) the mosquito? What steps would you take to destroy each of these insects? For what disease has the fly been very recently said to be responsible?
2. Give approximate dates when Edward Jenner discovered vaccination for prevention of Smallpox; (2) When Joseph Lister announced the value of Antiseptics in surgery; (3) When Louis Pasteur announced his treatment of Hydrophobia; (4) When Robert Koch discovered the tubercle bacillus?
3. How many pounds of air does the average adult inhale in twenty-four hours? What proportion of this weight is oxygen? Of the oxygen inhaled about what proportion is absorbed?
4. What is Carbon Dioxide? How does it cause asphyxiation?
5. What are the principal methods of sewage disposal for cities? What method would you choose for an inland town of ten thousand inhabitants?
6. Describe the self-purification of water in a river that receives the sewage of a town.
7. Describe a method of collecting and disposing of garbage in a city.
8. What are the causes of ordinary colds, and what would you do to combat them?
9. Why should the registration of births, deaths and marriages be compulsory?
10. Define the terms Endemic, Epidemic and Sporadic as used in medicine.
11. What is meant by the term "Certified Milk?" What prevents the general use of certified milk?
12. What are the harmful results of mouth breathing?

PHYSIOLOGY

(Answer Ten Questions Only)

1. What is the physiological effect of fatigue?
2. Mention three regions in which vaso-dilator nerve fibers have been demonstrated.
3. What physiological purposes do reflexes serve? Give two examples.
4. Draw diagram illustrating difference between (a) normal, (b) myopic, and (c) hypermetropic, eyes.
5. Why is the velocity of the blood stream slower in the capillaries than in the aorta?
6. What factors govern blood pressure in the pulmonary circulation?

7. What factors govern intracranial pressure?
8. How is oxygen held in the blood? Where and why is it given up?
9. What is the relation of the nerves to the movements of the stomach?
10. What is the function of (a) an enzyme, (b) an hormone?
11. What is the physiological importance of putrefactive changes in the contents of the large intestine due to bacteria?
12. Describe the ejection of the bile into the duodenum and the function of the gall-bladder.

GENERAL DIAGNOSIS

(Answer Ten Questions Only)

1. Give three methods for the estimation of the functional capacity of the kidneys.
2. Differentiate syphilitic adenitis from tubercular adenitis.
3. Describe a Pott's Fracture.
4. Give the symptoms and physical signs of an acute pneumothorax.
5. Give the diagnosis of a duodenal ulcer.
6. Describe myxoedema.
7. Give the aetiology and symptoms of tetany.
8. Describe the clinical picture of diphtheria.
9. Describe the bruit heard in
 - (a) aortic insufficiency
 - (b) mitral stenosis
 - (c) pulmonary insufficiency
 - (d) tricuspid insufficiency
 - (e) functional bruit of anaemia
10. Give the five cardinal symptoms in the diagnosis of Tabes.
11. How would you proceed in making a diagnosis in a case of suspected unilateral tuberculosis of the kidney?
12. Describe the complications which may be coincident with or follow a suppurative otitis media.

OBSTETRICS

(Answer Ten Questions Only)

1. Describe the muscles and tissues that go to make up the perineal body.
2. What are the four cardinal obstetric landmarks of the superior straight? Give also the boundaries of the inferior straight.
3. How would you convert an L. O. P. position into an L. O. A. before engagement?

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4. What are the symptoms and causes of albuminuria of pregnancy without structural change of the kidneys, and what is the prognosis?

5. Describe in detail the double application of forceps in R. O. P. position.

6. Under what conditions would you amputate the uterus after delivery of child by abdominal celiotomy.

7. Describe a Caput succedaneum, its cause and how it differs from encephalocele.

8. What are the measurements of the following diameters of the foetal head: Bitemporal; Biparietal Occipitio frontal; Occipitio-mental; Fronto mental.

9. In the clinical history of the last days of pregnancy, what conditions are liable to cause premature separation of the placenta (excluding placenta previa).

10. Describe some of the most serious diseases of the endometrium, giving their influence upon pregnancy.

11. Describe the foetal heart sounds, when and where they are best heard, and what is their relative rate compared to the mother.

12. How would you manage a case of threatened abortion at third month? Describe the conditions under which you would consider it favorable.

GYNECOLOGY

(Answer Ten Questions Only)

1. Describe the development of the genital tract.
2. Give the most frequent causes of diseases among women.

3. Give a historical record of a case of gynecology.

4. Malformations of the vagina. Causes?

5. Give the dynamics of the female pelvis.

6. What preparatory and postoperative procedures should be instituted to secure the best results after laparotomy?

7. Vaginitis, Pathology, Etiology, Varieties.

8. Tumors of the vagina. The most common. Etiology and diagnosis.

9. Fibromyomata. Definition. Varieties. Diagnosis.

10. Atresia of the genital canal. Causes. Diagnosis.
11. What is the Graafian vesicle? What is its function before and after rupture?

12. Hematoma of the vulva. Definition. Etiology. Diagnosis.

HISTOLOGY

(Answer Eight Questions Only and Identify Four Slides)

1. What microscopic characteristics would enable you to distinguish a section of the gall-bladder from one of the urinary bladder—both sections made perpendicular to the surface?

2. Name the layers of the cerebellar cortex and describe three cells characteristic of the outer layer. Make drawings or diagrams of the cells.

3. What microscopic features would enable you to distinguish a section of the respiratory nasal mucous membrane from one from the olfactory nasal mucous membrane?

4. Name and describe the structures seen under the microscope that would enable you to distinguish a section of dried bone from a section of hyaline cartilage.

5. Describe how a small bronchus (over 1 m.m. in diameter) would differ microscopically from a medium sized artery.

6. How would a transverse section of the duodenum differ histologically from a similar section of a fallopian tube? Make drawings or diagrams.

7. (a) Of what vessels are the vasa afferentia of the renal glomeruli branches?

(b) Describe the behavior of the vasa efferentia after they leave the glomeruli. Illustrate by drawing or diagram.

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8. What peculiar structure of medullated nerve fibers is demonstrated by treating them with weak silver nitrate solution and then exposing them to sunlight?

9. Describe how you would distinguish a section of spleen from one from the suprarenal gland or capsule.

10. What do you understand by the following terms:

(a) Telodendria; (b) Spermatogenesis; (c) Centrosome; (d) Achromatic spindle; (e) Karyokinesis.

11. Identify two slides.

12. Identify two slides.

PATHOLOGY

(Answer Eight Questions Only and Identify Four Slides)

1. Name three (3) acute infectious diseases in which the relative number of leucocytes are increased and three (3) in which they remain normal.

2. In cases of death after the first few days from the effect of extensive burns what internal or organic changes are likely to be found on autopsy?

3. What blood vessels of the brain are most likely to be affected and why, by (a) Hemorrhage; (b) Thrombus; (c) Embolism?

4. Describe the extent to which an injury to a nerve may go before restoration of function will be unlikely or impossible.

5. Describe the condition found on autopsy after sudden death from acute dilatation of the heart and under what circumstances is this accident most likely to occur?

6. Describe the changes in the pancreas which frequently take place after death which may lead to serious error on autopsy unless taken into consideration.

7. Describe the blood changes in

(a) Myelogenous leucemia.

(b) Splenic leucemia.

8. Describe the microscopic changes found in Atrophic Cirrhosis of the liver.

9. Compare the pathological findings in Bronchopneumonia with those found in lobar pneumonia.

10. What pathologic changes are liable to be found as a result of gonorrhoeal infection many years subsequent to the acute infection?

CHEMISTRY AND TOXICOLOGY

(Answer Ten Questions Only)

1. How would you distinguish alum from boric acid by a flame reaction?

2. How is SO_2 made and what are its uses?

3. How may the test for diacetic acid be confused?

4. Name six of the principal derivatives of the hydrocarbons.

5. How do fermentation and putrefaction differ?

6. Show with examples the difference between volatile oils and fixed oils.

7. Name eight functions of bile.

8. Describe the chemical changes which take place in muscular activity.

9. How would you prove that a given case of fatal poisoning had been due to strychnine?

10. What poisons may cause sudden death?

11. Give the treatment for poisoning by alum; by copper compounds.

12. Give the treatment for poisoning by gasoline; by formalin.

BACTERIOLOGY

(Answer Ten Questions Only)

1. Discuss (not over 1 page) *Spirillum Cholerae Asiaticae*.

2. Name 3 pathogenic Cocci which are Gram negative; name 2 pathogenic Bacilli which are Gram positive.

3. How would you stain a specimen of malarial blood with Wright's stain? Describe the appearance of the different elements.

4. How would you make an Anerobic culture? Give 2 methods.

5. Name 2 chromogenic bacilli and give short descriptions of each.

6. Give in detail 2 methods of transmitting Yellow fever.

7. What causes Tinea Versicolor, Thrush, Relapsing Fever, Glanders, Amebic Dysentery?

8. How would you distinguish *Treponema Pallidum* from other Spirochetes?

9. How would you distinguish a case of Typhoid from one of Paratyphoid fever?

10. Draw pictures of magnified Plague bacilli, Diphtheria bacilli, Anthrax bacilli, Pneumococcus, Gonococcus.

11. Explain difference between active and passive immunity. (Not over 1 page.)

12. Explain cause of poisoning after eating (a) hot cooked meat; (b) cold meat which has stood for 48 hours.

ANATOMY

(Answer Ten Questions Only)

1. Name the branches of the abdominal aorta and give the relations of one of them.

2. Describe the peculiarities of the arteries of the scalp. (b) Describe the lymphatics of the scalp.

3. Give the relations of the bladder.

4. What bones form the walls of the orbit? Name the fossae in immediate relationship with these walls.

5. Describe the mesentery; (b) Describe the arrangement of the mesenteric vessels and nerves.

6. Describe the characteristics of the membrana tympani as seen through an ear speculum.

7. Describe briefly the membranes of the cord; (b) The membranes of the brain.

8. Describe the anterior annular ligament of the wrist. What structures pass beneath it?

9. Give brief description of the peritoneum.

10. Give the origin, course and distribution of the long thoracic nerve.

11. At what point in the oesophagus are foreign bodies most apt to lodge?

12. What are the land marks for the lower border of the lung?





